ORDER NO. AD9903066C8

Service Manual

CD Changer

Compact Disc Player

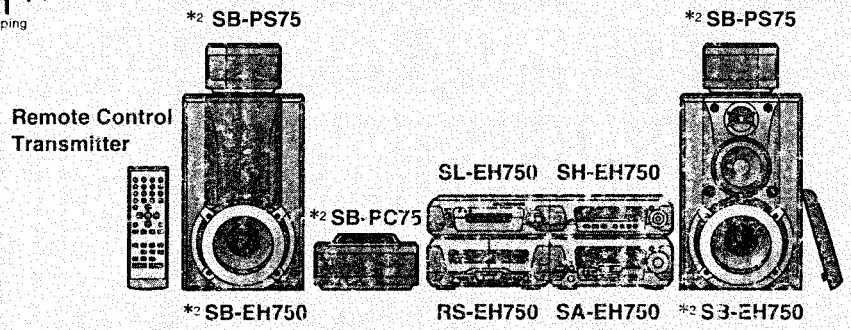
SL-EH750

COMPACT disc DIGITAL AUDIO

Colour
(S) ..... Silver Type

Area
(E) ..... Europe.

MASH *1
multi-stage noise shaping



System	SC-EH750
Sound Processor	SH-EH750
Tuner/Amplifier	SA-EH750
CD Changer	**SL-EH750**
Cassette Deck	RS-EH750
Front Speakers*2	SB-EH750
Center Speaker*2	SB-PC75
Surround Speakers*2	SB-PS75

Because of unique interconnecting cables, when a component requires service, send or bring in the entire system.

Traverse Deck : RAE0152Z MECHANISM SERIES

Specifications

Audio Section

No. of channels:	2 (left and right, stereo)
Frequency response:	20 to 20,000 Hz (+0.5 dB to –2 dB)
Output voltage:	0.78 V (at 0 dB)
Dynamic range:	85 dB
S/N:	95 dB
Total harmonic distortion:	0.02 % (1 kHz, 0 dB)
Wow and flutter:	Below measurable limit
Digital filter:	8 fs
DA converter:	1 bit DAC MASH
Output impedance:	1 kΩ
Load impedance:	More than 10 kΩ

Pickup Section

Wavelength:	780 nm

General

Dimensions (W×H×D):	293×89×288 mm
Weight:	2.2 kg

Notes: Specifications are subject to change without notice.
Weight and dimensions are approximate.
Total harmonic distortion is measured by the digital spectrum analyzer.

*1: MASH is a trademark of NTT.
*2: Made in Singapore.

⚠WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Technics®

© 1999 Matsushita Electric Industrial Co.,Ltd.
All rights reserved. Unauthorized copying and distribution is a violation of law.

■ Contents

	Page
Handling Precautions for Traverse Deck	2
Precaution of Laser Diode	2,3
Location of Controls	3
Operation Checks and Component Replacement Procedures	4~18
Error Code Display and Servo Adjustment Function	19,20
Schematic Diagram	21~26
Printed Circuit Board Diagram	27~29
Wiring Connection Diagram	30
Type Illustration of IC's, Transistors and Diodes	31
Troubleshooting Guide	32,33
Block Diagram	34~36
Terminal Function of IC's	37~40
Replacement Parts List	41~43
Cabinet Parts Location	44
Loading Unit Parts Location	45

NOTE:

Refer to the service manual for Model No. SA-EH750 (ORDER No. AD9903063C2) for information on "Accessories", "Connections", "Installation", "Operations" and "Packaging".

CAUTION:
THIS PRODUCT UTILIZES A LASER.
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

■ Handling Precautions for Traverse Deck

The laser diode in the traverse deck (optical pickup) may break down due to potential difference caused by static electricity of clothes or human body. So, be careful of electrostatic breakdown during repair of the traverse deck (optical pickup).

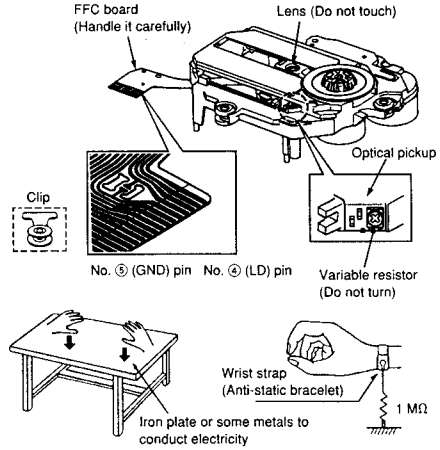
• Handling of traverse deck (optical pickup)

1. Do not subject the traverse deck (optical pickup) to static electricity as it is extremely sensitive to electrical shock.
2. To protect the laser diode against electrostatic breakdown, short the flexible board (FFC board) with a clip or similar object.
3. Take care not to apply excessive stress to the flexible board (FFC board).
4. Do not turn the variable resistor (laser power adjustment). It has already been adjusted.

• Grounding for electrostatic breakdown prevention

1. Human body grounding
   Use the anti-static wrist strap to discharge the static electricity from your body.
2. Work table grounding
   Put a conductive material (sheet) or steel sheet on the area where the traverse deck (optical pickup) is placed, and ground the sheet.

Caution:
The static electricity of your clothes will not be grounded through the wrist strap. So, take care not to let your clothes touch the traverse deck (optical pickup).

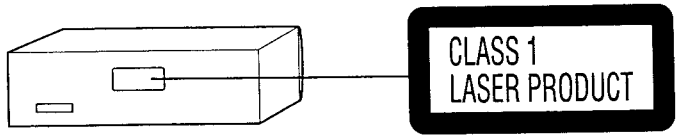


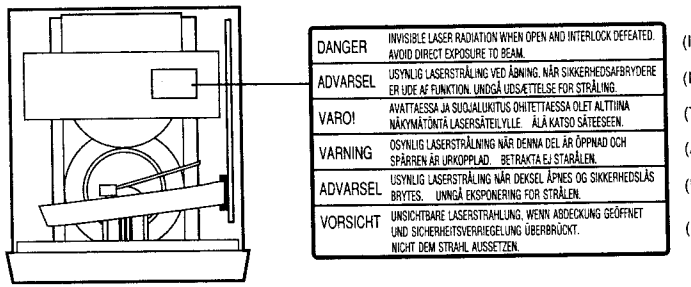
■ Precaution of Laser Diode

CAUTION: This product utilizes a laser diode with the unit turned "on", invisible laser radiation is emitted from the pick up lens.
Wave length: 780 nm
Maximum output radiation power from pick up: 100 μW/VDE

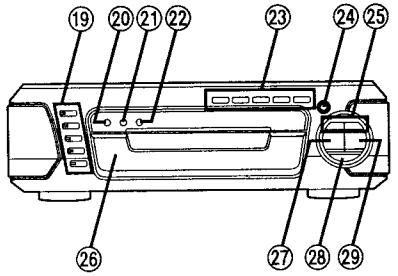
Laser radiation from the pick up unit is safety level, but be sure the followings:

1. Do not disassemble the pick up unit, since radiation from exposed laser diode is dangerous.
2. *Do not adjust the variable resistor on the pick up unit. It was already adjusted.*
3. Do not look at the focus lens using optical instruments.
4. Recommend not to look at pick up lens for a long time.




DANGER
INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCK DEFEATED. AVOID DIRECT EXPOSURE TO BEAM.
(Inside of product)
ADVARSEL
USYNLIG LASERSTRÅLING VED ÅBNING, NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING.
(Indersiden at apparatet)
VARO!
AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTÖNTÄ LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.
(Tuotteen sisällä)
VARNING
OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN.
(Apparatens insida)
ADVARSEL
USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES OG SIKKERHEDSLÅS BRYTES. UNNGÅ EKSPONERING FOR STRÅLEN.
(Produktets innside)
VORSICHT
UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET UND SICHERHEITSVERRIEGELUNG ÜBERBRÜCKT. NICHT DEM STRAHL AUSSETZEN.
(Im Inneren des Gerätes)

■ Location of Controls



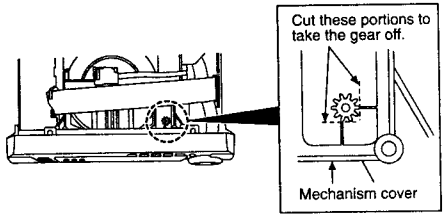
⑲ **Disc select buttons and indicators (DISC, 1–5)**
Green: Indicates that the tray is ready to play its CD or to be opened.
⑳ **Random play button (RANDOM)**
㉑ **Repeat button (REPEAT)**
㉒ **CD edit button (EDIT)**
㉓ **Disc direct open buttons (DIRECT OPEN, DISC 1– DISC 5)**
㉔ **Disc tray open/close button (▲ OPEN/CLOSE)**
㉕ **Skip/search buttons (I◄◄/◄◄, ►►/►►I)**
㉖ **Disc tray**
㉗ **Stop button (■)**
㉘ **Pause button (II)**
㉙ **Play button and indicator (▷)**
The color of the indicator depends on the operation.
If stopped: orange
If playing: green
If paused: flashes

■ Operation Checks and Component Replacement Procedures

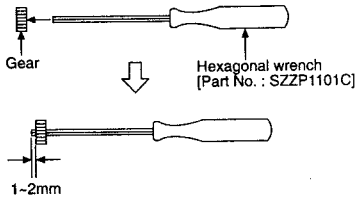
Gear for servicing (as jig) information

1. This unit has a gear which used for checking items (Open/close of disc tray, up/down operation of traverse unit by manually) when servicing. (For gear information, that is described on the items for disassembly procedures.)
2. For preparation of gear (for servicing), perform the procedures as follows.
3. In case of re-servicing the same set, the "gear for servicing" may be took off because it had been used. So, the "gear for servicing" must be stored.

1. Remove the gear provided with mechanism cover as shown below.



2. Insert the hexagonal wrench (2mm) into the gear, and then project the tip of wrench for 1~2mm length.



(Preparation of gear as jig is completed.)

• Contents

■ **Checking Procedures for each P.C.B.** Page.

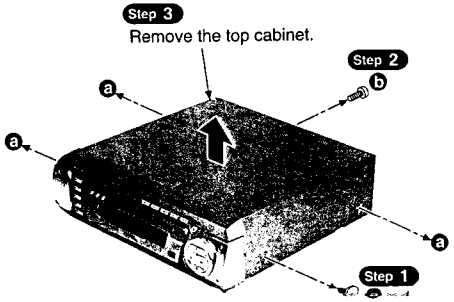
1. Checking for the main P.C.B.. . . . . 4.
2. Checking for the operation P.C.B.. . . . . 5.
3. Checking for the CD servo P.C.B.. . . . . 6.

■ **Main Component Replacement Procedures/Each parts disassembly and reassembly**

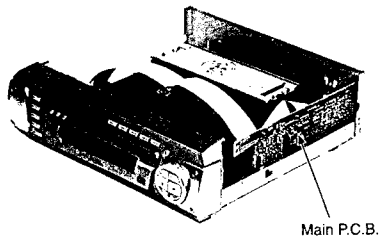
1. Replacement for the traverse desk ass'y. . . . . 7~9.
2. Replacement for the disc tray. . . . . 9~11.
3. Disassembly and reassembly for mechanism base drive unit. . . . . 11~17.
4. Replacement for the motor ass'y. . . . . 18.

■ Checking Procedures for each P.C.B.

1. Checking for the main P.C.B.

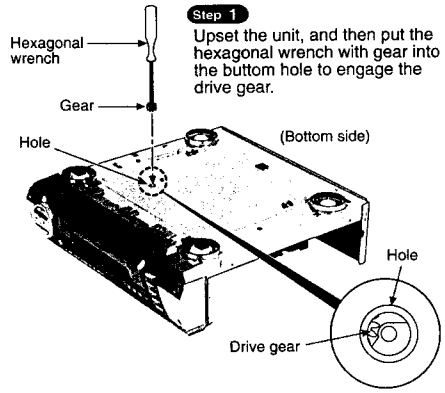


· **Check the main P.C.B. as shown below.**



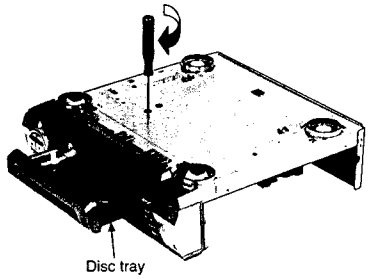
2. Checking for the operation P.C.B.

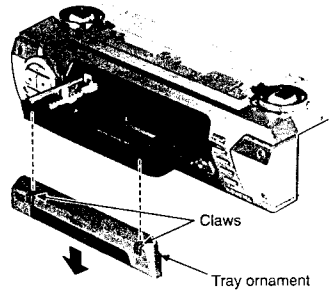
· Follow the Step 1 ~ Step 3 of the item 1 in checking procedure for each P.C.B. on page 4.



Step 1
Upset the unit, and then put the hexagonal wrench with gear into the buttom hole to engage the drive gear.

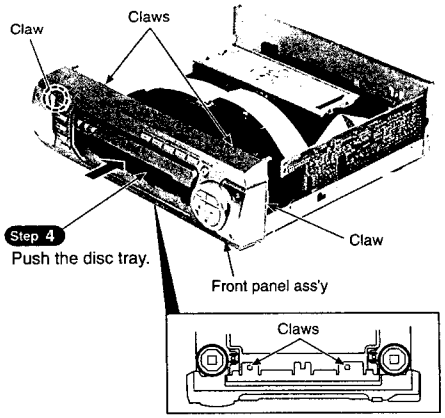
Step 2
Rotate the hexagonal wrench with gear in direction of arrow, and then open the disc tray.





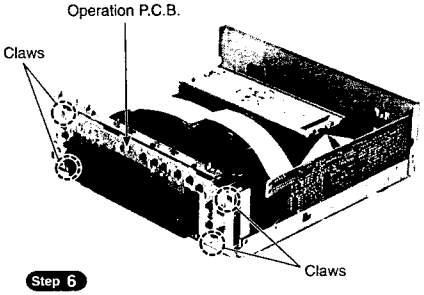
Step 3
Release the 2 claws, and then remove the tray ornament.

Step 5
Release the 6 claws, and then remove the front panel ass'y.



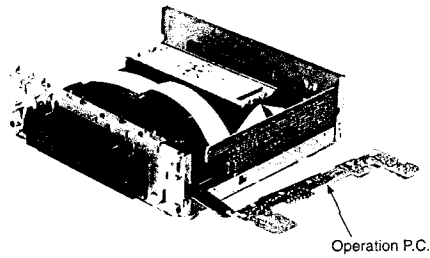
Step 4
Push the disc tray.

(Bottom side)



Step 6
Release the 4 claws, and then remove the operation P.C.B..

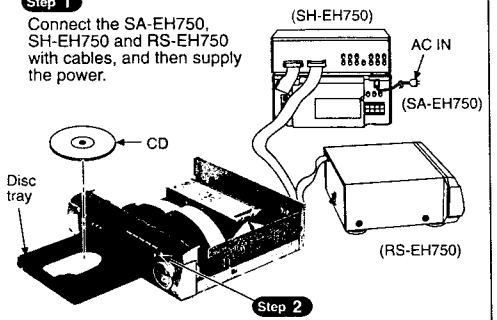
· **Check the operation P.C.B. as shown below.**



3. Checking for the CD servo P.C.B.

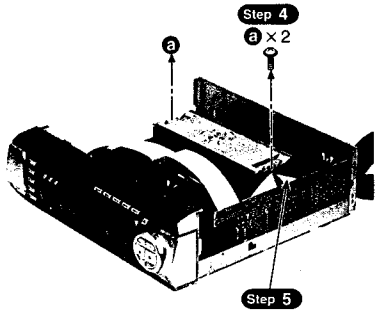
- Follow the Step 1 ~ Step 3 of the item 1 in checking procedure for each P.C.B. on page 4.

Step 1
Connect the SA-EH750, SH-EH750 and RS-EH750 with cables, and then supply the power.



Step 2
Push the open/close button, and then open the disc tray.

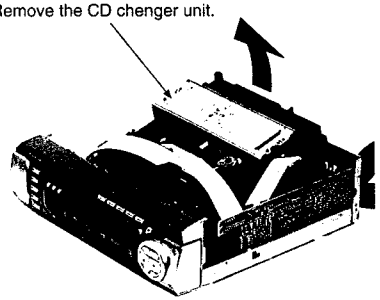
Step 3
Put the CD into the disc tray.



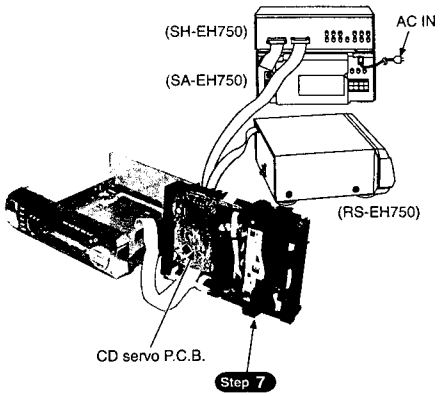
Step 4
Remove the CD chenger unit.

Step 5
Remove the FFC from connector (CN401).

Step 6
Remove the CD chenger unit.



- Check the CD servo P.C.B. as shown below.

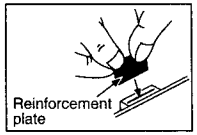


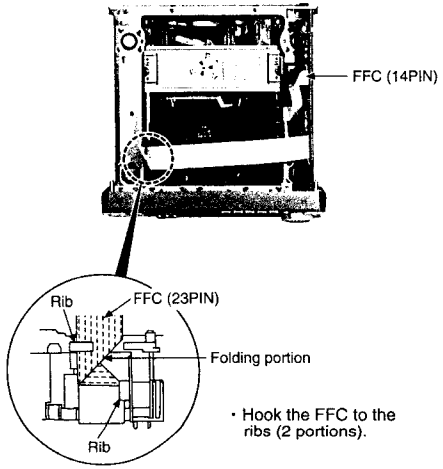
Step 7
Rise the CD chenger unit.

NOTE
- The CD unit should be checked under "PLAY MODE".
- Do not operate the "DISC change" while the unit is stayed vertically.

Cable arragement

■ Notice for installing the FFC
When connecting the FFC, insert it straight with nipping the reinforcement plate by finger.





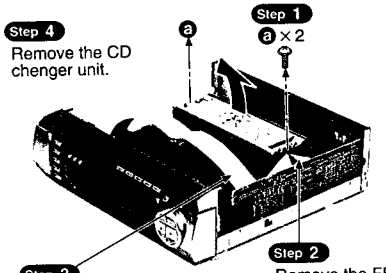
- Hook the FFC to the ribs (2 portions).

■ Main Component Replacement Procedures / Each parts disassembly and reassembly

1. Replacement for the traverse deck ass'y

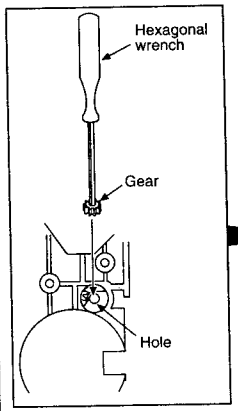
- Follow the Step 1 ~ Step 3 of the item 1 in checking procedure for each P.C.B. on page 4.
- Follow the Step 1 ~ Step 4 of the item 2 in checking procedure for each P.C.B. on page 5.

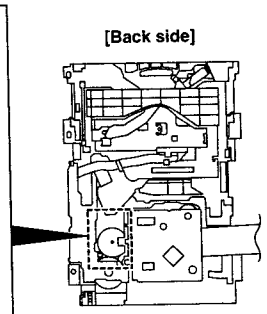
Step 4
Remove the CD chenger unit.



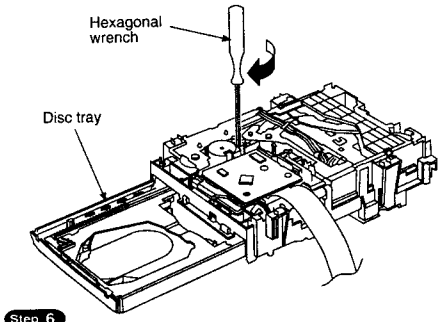
Step 3
Remove the FFC from connector (CN402).

Step 2
Remove the FFC from connector (CN401).



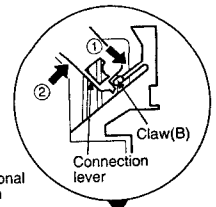


Step 5
Insert the gear with hexagonal wrench into the hole.

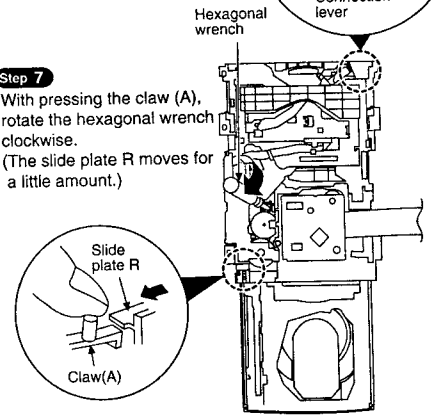


Step 6
Rotate the hexagonal wrench in the direction of arrow (clockwise), and then open the disc tray fully.

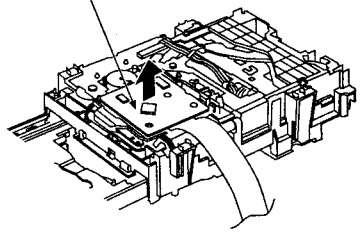
Step 8
Pressing the claw (B) in the direction of arrow①, the connection lever moves in the direction of arrow②.



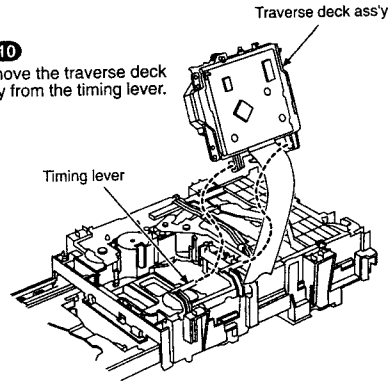
Step 7
With pressing the claw (A), rotate the hexagonal wrench clockwise.
(The slide plate R moves for a little amount.)

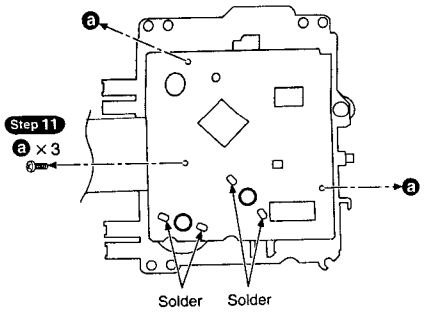


Step 9
Lift up the traverse deck ass'y.



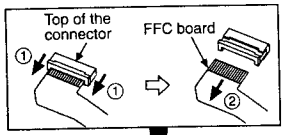
Step 10
Remove the traverse deck ass'y from the timing lever.

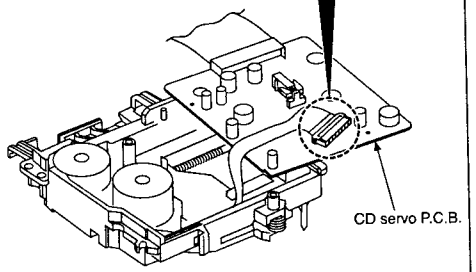




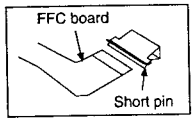
Step 12
Unsolder the motor terminals (4 points).

Step 13
Remove the FFC board from the connector, and then remove the CD servo P.C.B..

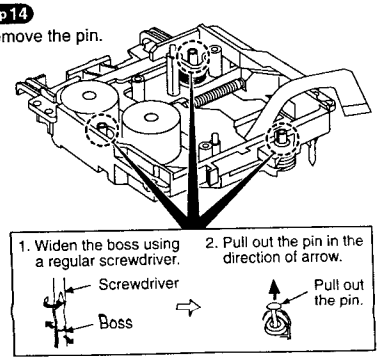




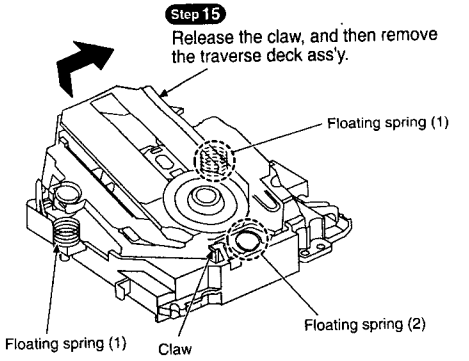
Caution:
Insert a short pin into the traverse unit FFC board.
(Refer to "**Handling Precautions for Traverse Deck**".)



Step 14
Remove the pin.

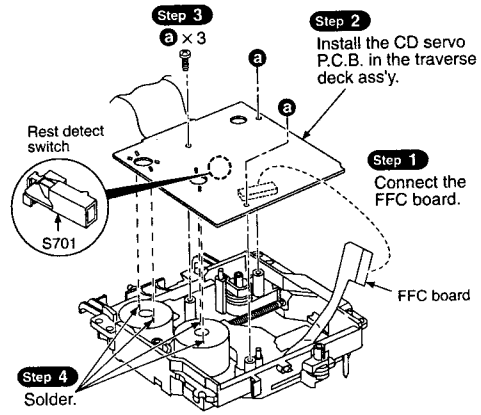

1. Widen the boss using a regular screwdriver.
2. Pull out the pin in the direction of arrow.
Screwdriver
Boss
Pull out the pin.

Step 15
Release the claw, and then remove the traverse deck ass'y.



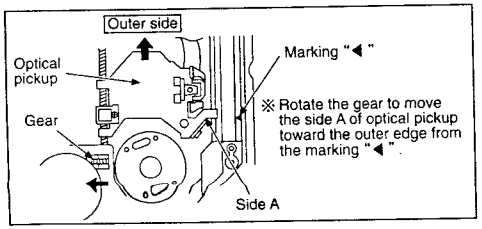
NOTE
Be careful not to lose the 3 floating springs because those will also be removed on removal of the traverse deck ass'y.

Installation of the CD servo P.C.B. after replacement



Note for installation of the CD servo P.C.B.

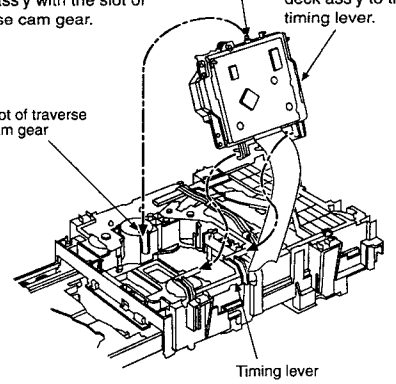
Before installing the CD servo P.C.B., move the optical pickup toward the outer edge from the mark "◀".
[Otherwise, the rest detect switch (S701) mounted on the CD servo P.C.B. may be damaged.]

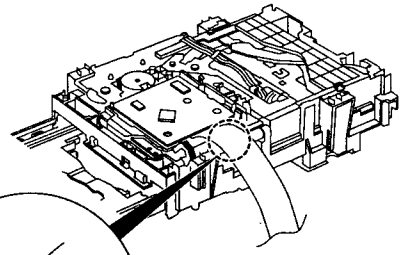

Outer side
Optical pickup
Gear
Marking "◀"
※Rotate the gear to move the side A of optical pickup toward the outer edge from the marking "◀".
Side A

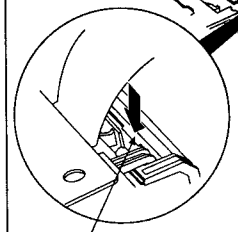
Installation for traverse deck ass'y

Step 2
Align the boss of traverse deck ass'y with the slot of traverse cam gear.

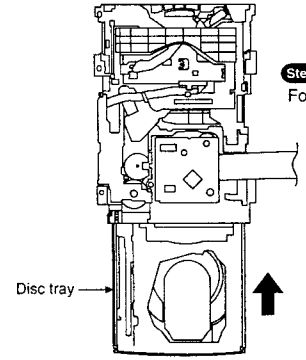
Step 1
Install the traverse deck ass'y to the timing lever.



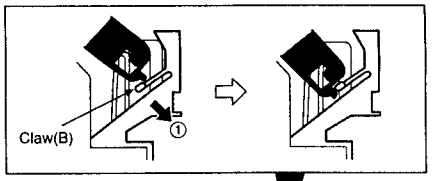


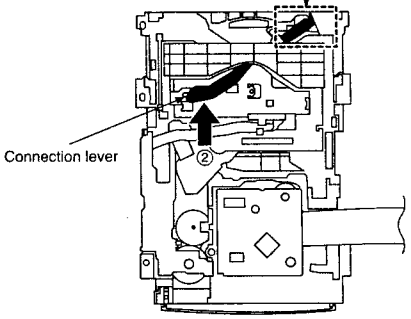


Step 3
Force the claw of timing lever.



Step 4
Force the disc tray fully.





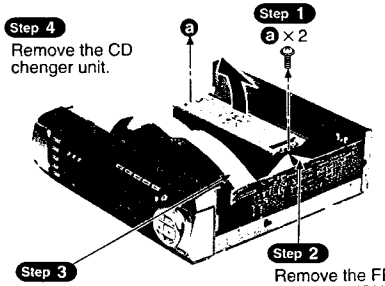
Step 5
With pressing the claw (B) in the direction of arrow ①, force the connection lever in the direction of arrow ②.

2. Replacement for the disc tray

- Follow the Step 1 ~ Step 3 of the item 1 in checking procedure for each P.C.B. on page 4.
- Follow the Step 1 ~ Step 4 of the item 2 in checking procedure for each P.C.B. on page 5.

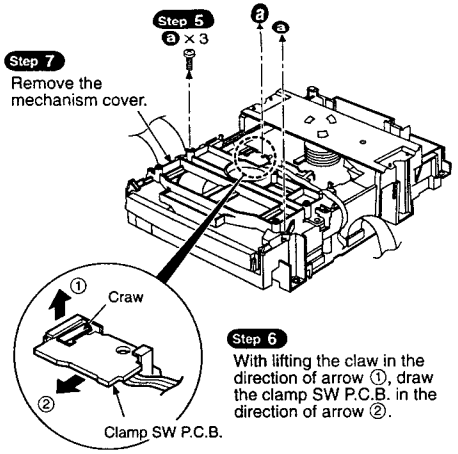
Step 4
Remove the CD chenger unit.

Step 1
ⓐ × 2

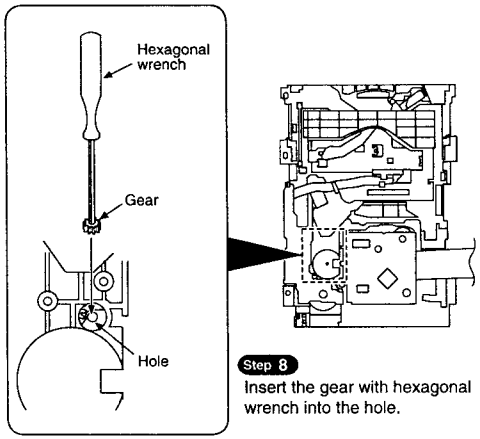


Step 3
Remove the FFC from connector (CN402).

Step 2
Remove the FFC from connector (CN401).

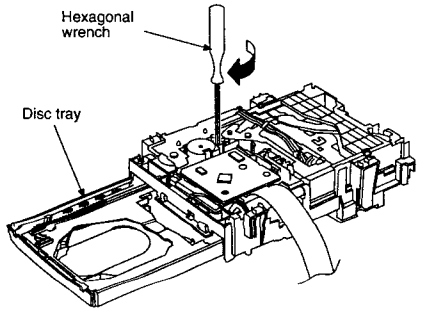


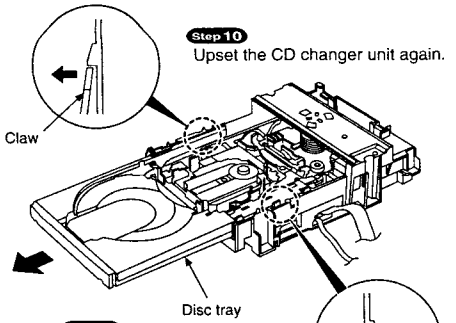
Step 6
With lifting the claw in the direction of arrow ①, draw the clamp SW P.C.B. in the direction of arrow ②.

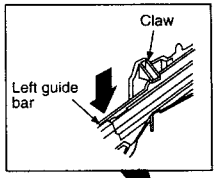


Step 8
Insert the gear with hexagonal wrench into the hole.

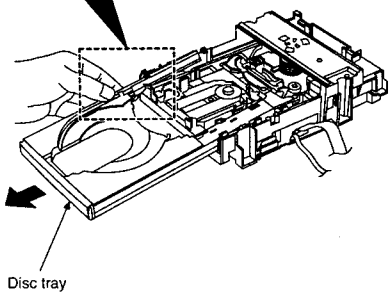
Step 9
Rotate the hexagonal wrench in the direction of arrow (clockwise), and then open the disc tray fully.





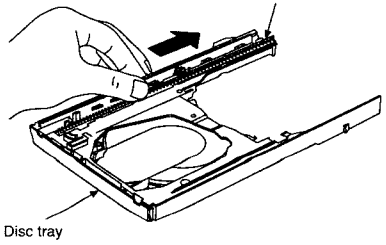


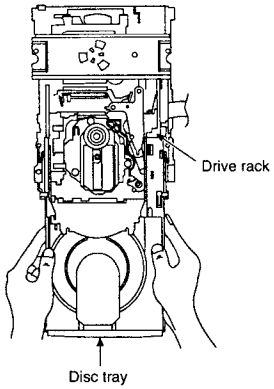
Step 12
With forcing the left guide bar manually because the left guide bar interfers with claw, draw the disc tray.



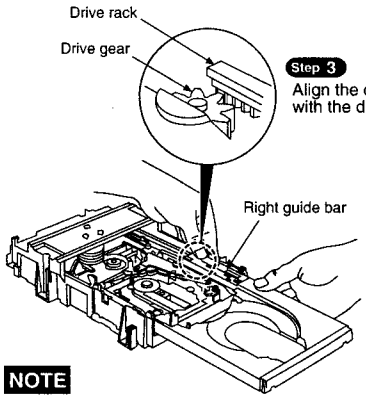
Installation of the disc tray after replacement

Step 1
Slide the drive rack fully in the direction of arrow.





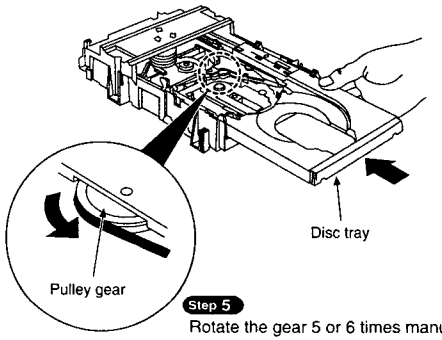
Step 2
Holding the drive rack not to move, install the disc tray



Step 3
Align the drive rack with the drive gear.

NOTE
Force the right guide bar of tray base manually not to move upwards.

Step 4
Holding the disc tray manually,rotate the pulley gear in the direction of arrow.

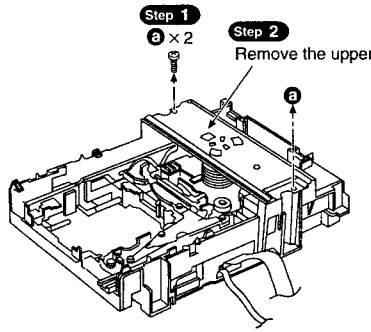


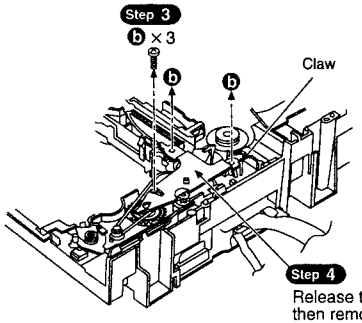
Step 5
Rotate the gear 5 or 6 times manually, and then push the disc tray.

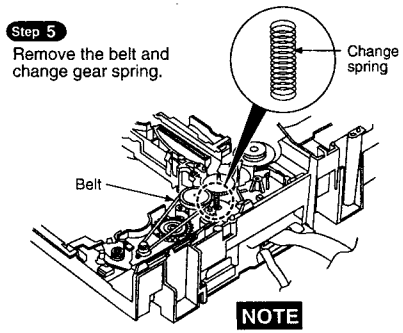
3. Disassembly and reassembly for mechanism base drive unit

Disassembly for mechanism base drive unit

- Follow the Step 1 ~ Step 3 of the item 2 in checking procedure for each P.C.B. on page 4.
- Follow the Step 1 ~ Step 4 of the item 2 in checking procedure for each P.C.B. on page 5.
- Follow the Step 1 ~ Step 10 of the item 1 in main component replacement procedures on page 7.
- Follow the Step 1 ~ Step 12 of the item 2 in main component replacement procedures on pages 9 and 10.

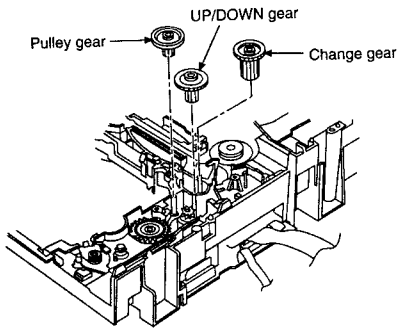


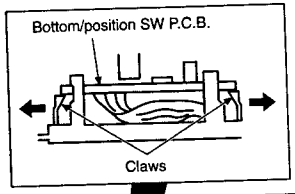




NOTE
Take care not to lose the change gear spring.

Step 6
Remove the pulley gear, change gear and UP/DOWN gear.

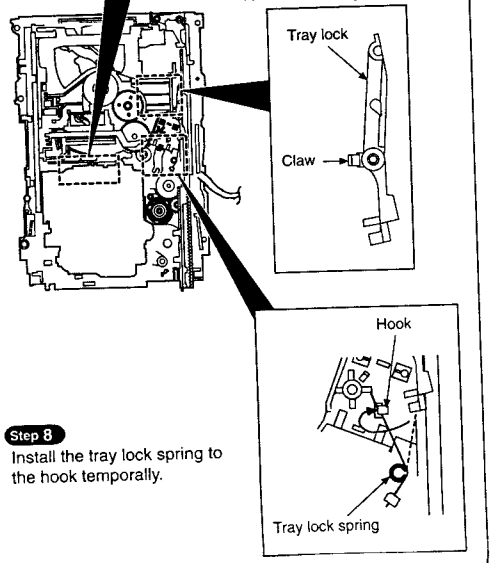




Step 7
Release the 2 claws, and then remove the bottom/position SW P.C.B..

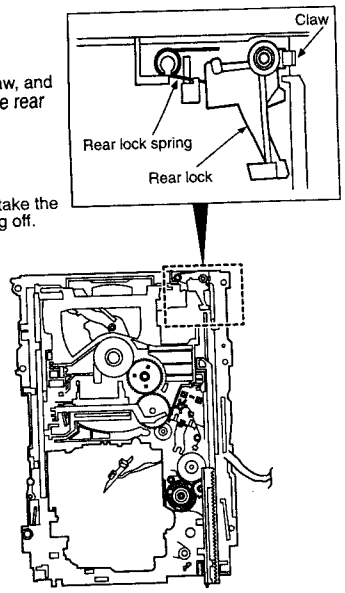
Step 8
Install the tray lock spring to the hook temporally.

Step 9
Release the claw, and then remove the tray lock.

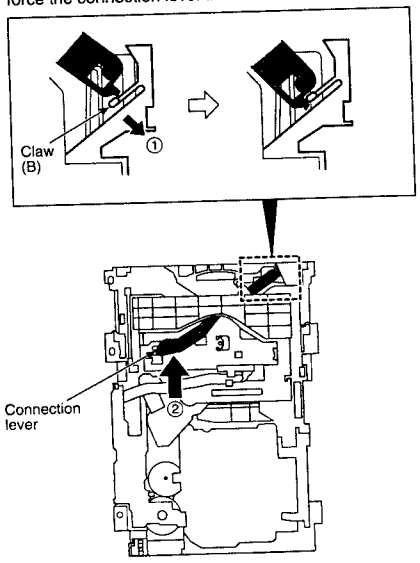


Step 10
Release the claw, and then remove the rear lock.

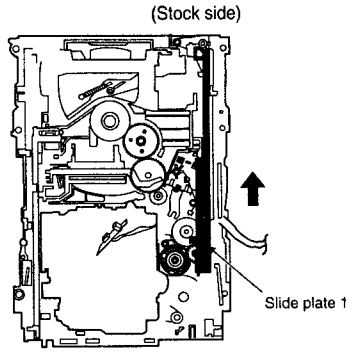
NOTE
Take care not take the rear lock spring off.



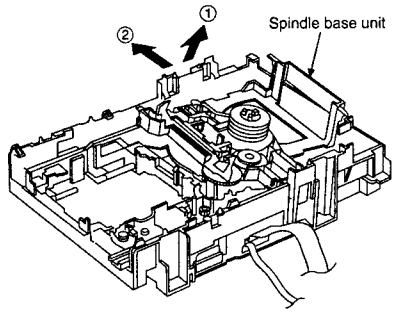
Step 11
Pressing the claw (B) in the direction of arrow ①, force the connection lever in the direction of arrow ②.

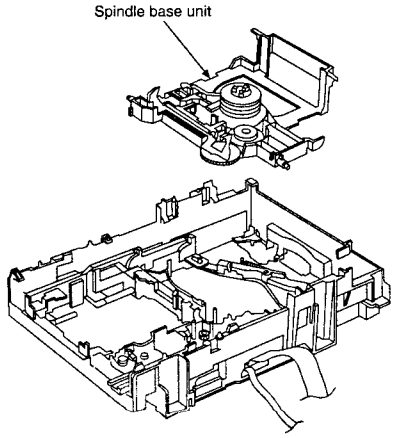


Step 12
Move the slide plate 1 to the end of stock side.

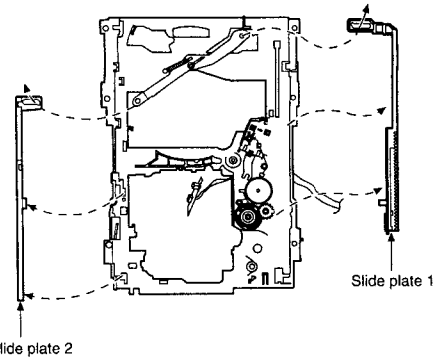


Step 13
Lift up the left end of spindle base unit in the direction of arrow ①, and then remove the unit in the direction of arrow ②.

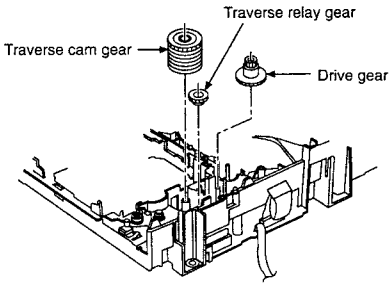




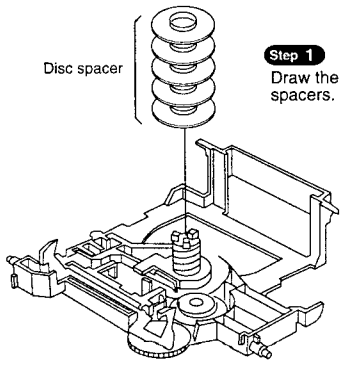
Step 14
Remove the slide plate 1 and slide plate 2.



Step 15
Remove the traverse relay gear, traverse cam gear and drive gear.

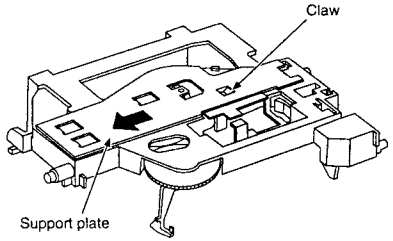


Diassembly/reassembly for the spindle base unit

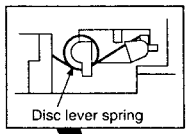


Step 1
Draw the 5 disc spacers.

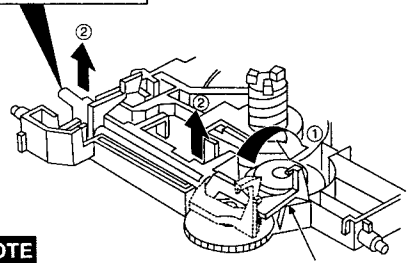
Step 2
Pushing the claw, slide the support plate in the direction of arrow, and then remove it.



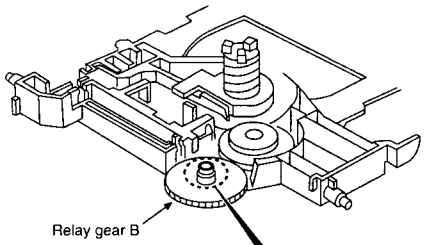
(Installation for disc lever spring)



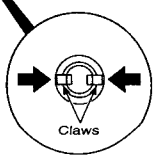
Step 3
Rotate the disc lever in the direction of arrow ①, draw the disc lever.

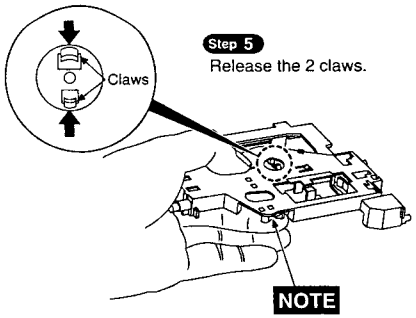


NOTE
Take care not to lose the disc lever spring.



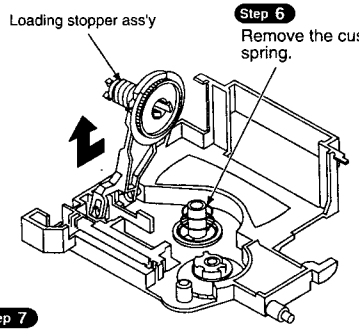
Step 4
Release the 2 claws, and then draw the relay gear B.





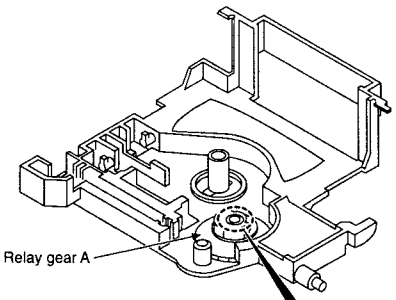
Step 5
Release the 2 claws.

NOTE
Hold the loading stopper ass'y manually because it is flipped by spring.

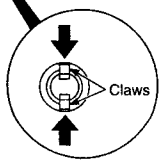


Step 6
Remove the cushion spring.

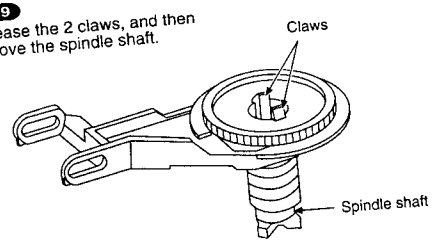
Step 7
Remove the loading stopper ass'y in the direction of arrow.



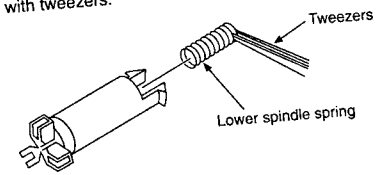
Step 8
Release the 2 claws, and then remove the relay gear A.



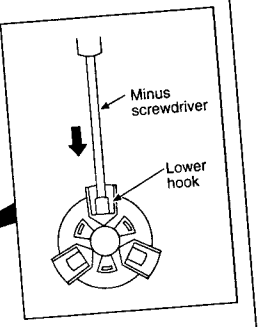
Step 9
Release the 2 claws, and then remove the spindle shaft.

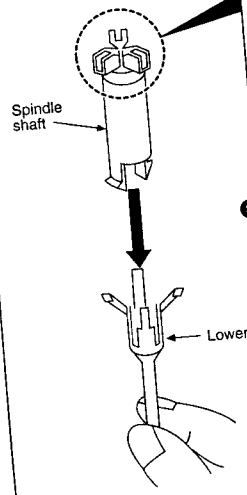


Step 10
Remove the lower spindle spring with tweezers.



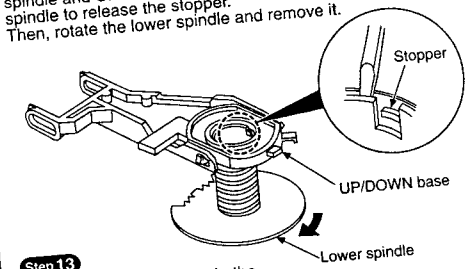
Step 11
Force the lower hook with thin tip of minus screwdriver.



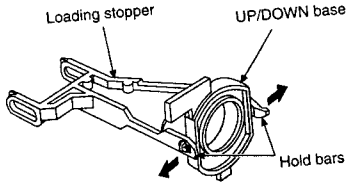


Step 12
Squeeze the shaft of lower hook, and then draw it.

Step 14
Insert the thin tip of minus screwdriver between the lower spindle and UP/DOWN base, and then slacken the lower spindle to release the stopper.
Then, rotate the lower spindle and remove it.



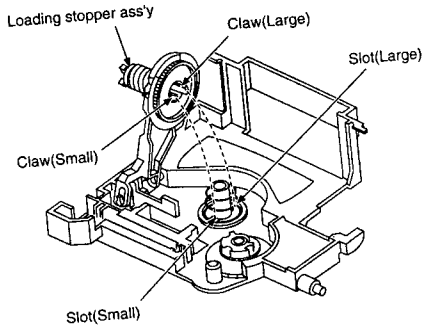
Step 13
Rotate the lower spindle in the direction of arrow until the lower spindle interferes with stopper.



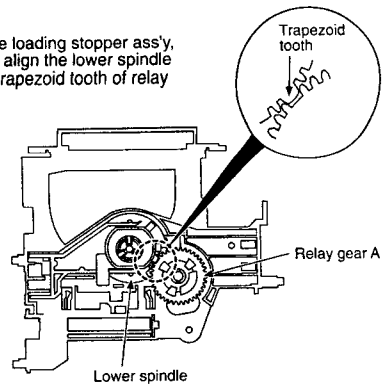
Step 15
Rotate the UP/DOWN base at a 90 degree angle. Then, spread the hold bars of loading stopper and remove the UP/DOWN base.

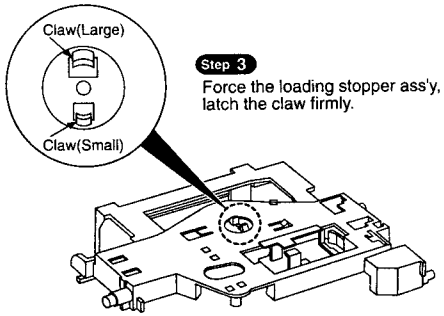
Installation for loading stopper ass'y

Step 1
Align the claw of loading stopper ass'y with the slot of spindle base. (Caution should be exercised when alignment of claw due to the size of claws.)



Step 2
Lower the loading stopper ass'y, and then align the lower spindle with the trapezoid tooth of relay gear A.

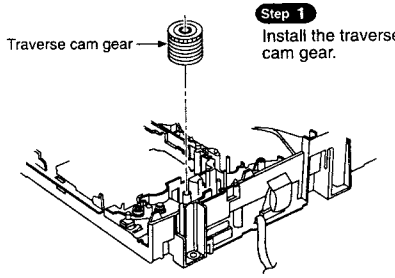




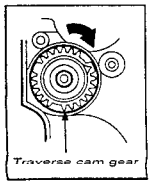
Step 3
Force the loading stopper ass'y, latch the claw firmly.

Reassembling for mechanism base drive unit

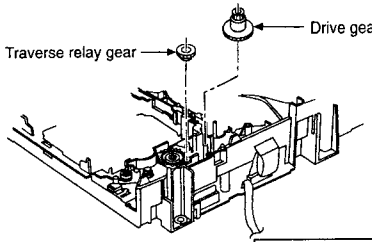
Step 1
Install the traverse cam gear.



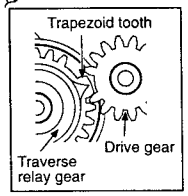
Step 2
Rotate the traverse cam gear to the direction of arrow.

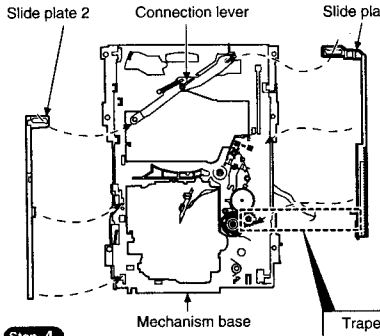


Step 3
Install the drive gear and traverse relay gear.



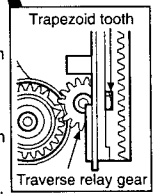
※ When installing the traverse relay gear, align the trapezoid tooth of gear with tooth of drive gear.

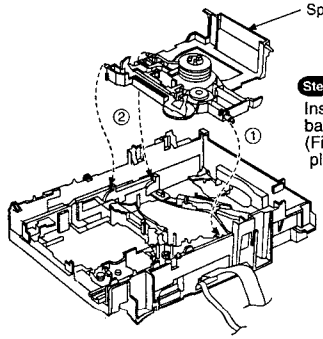




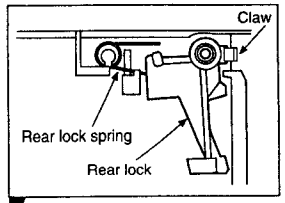
Step 4
Install the slide plate 2 to the mechanism base, and then match to the connection lever.

Step 5
Install the slide plate 1 to the mechanism base, and then match to the connection lever and align the trapezoid tooth of traverse relay gear with the slide plate 1.

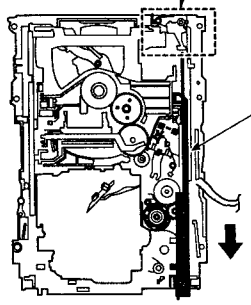




Step 6
Install the spindle base unit.
(First, install slide plate 1.)

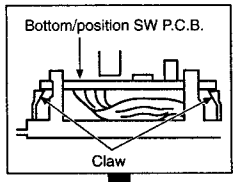


Step 8
Install the rear lock.
(The claw should be latched.)



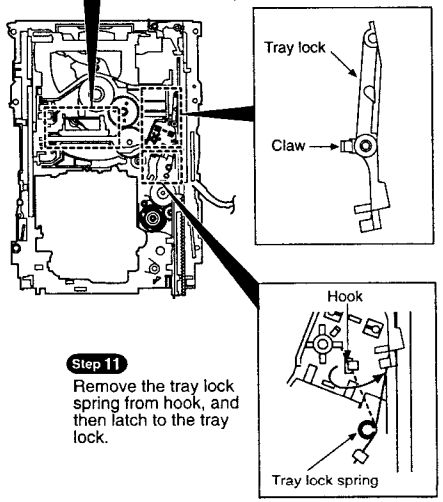
(Front side)

Step 7
Move the slide plate 1 to forward fully.



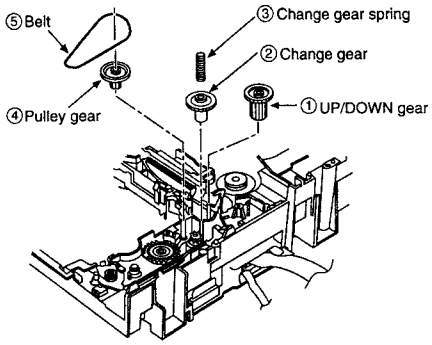
Step 9
Install the bottom/position SW P.C.B..
(The claw should be latched.)

Step 10
Install the tray lock.
(The claw should be latched.)

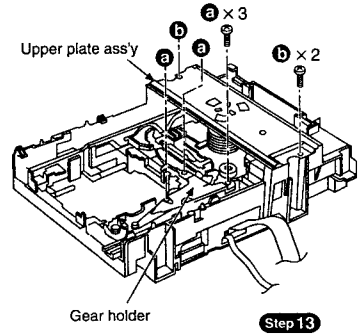


Step 11
Remove the tray lock spring from hook, and then latch to the tray lock.

Step 12
Install the UP/DOWN gear, change gear, change gear spring, pulley gear and belt in the order of ①-⑤.



Step 14
Install the upper plate ass'y, and then tighten the screw (ⓑ).



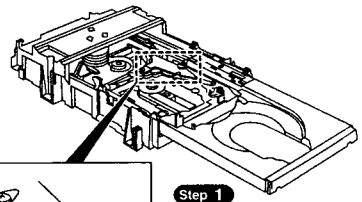
Step 13
Install the gear holder, and then tighten the screw (ⓐ).

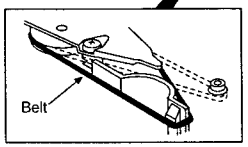
Step 15
Install the tray base, traverse deck and mechanism cover.
(Refer to the items 1 and 2 of Main Component Replacement Procedures.)

[Operation chack after servicing]
Check the proper operation of following items with gear and hexagonal screwdriver.
1) Open/close of tray base.
2) Moving the tray base to the stock side.
3) UP/DOWN operation of spindle base unit.
4) UP/DOWN operation of traverse unit.

4. Replacement for the motor ass'y

- Follow the Step 1 ~ Step 3 of the item 2 in checking procedure for each P.C.B. on page 4.
- Follow the Step 1 ~ Step 4 of the item 2 in checking procedure for each P.C.B. on page 5.
- Follow the Step 1 ~ Step 10 of the item 2 in main component replacement procedures on pages 9 and 10.





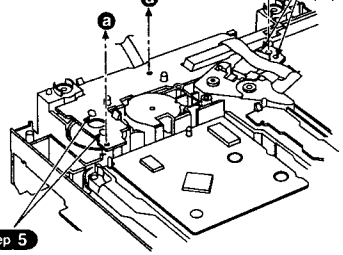
Step 1
Install the belt temporarily.

NOTE
Take care not apply the grease to the belt.

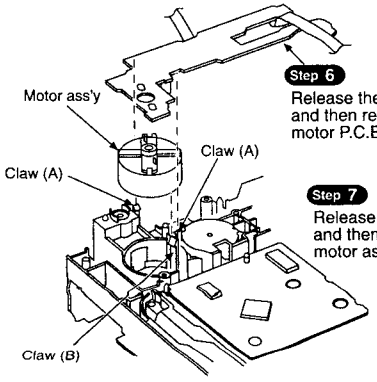
Step 2
Upset the CD changer unit.

Step 3
ⓐ×3

Step 4
Unsolder the plunger terminals (2 points).



Step 5
Unsolder the motor terminals (2 points).

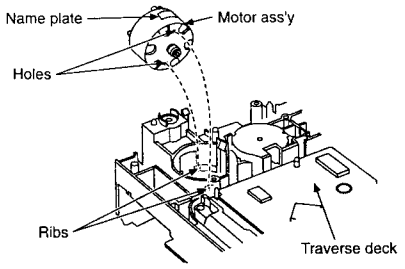


Step 6
Release the 2 claws (A), and then remove the motor P.C.B..

Step 7
Release the claw (B), and then remove the motor ass'y.

Notice for motor ass'y installation

1. Locate the name plate of motor to the traverse deck.
2. Align the hole of motor with the ribs.



■ Error Code Display and Servo Adjustment Function

This unit has an error code display function, so that if the unit operates incorrectly, the fault is displayed using an error code on the FL display of the Tuner/Amplifier (SA-EH750). It also has a servo adjustment function for displaying the status of servo system functions (Focus, Tracking, CLV Servo) on the FL display of the Tuner/Amplifier.
The system control IC and FL display are part of the Tuner/Amplifier so make sure the system has been connected properly before using three functions. (This unit can be operated independently, although the error code display and servo adjustment functions cannot be used.)
Use these two functions for guidance during fault diagnosis and repair.

Note:
Check beforehand for scratching or soiling of the test disc (SZZP1054C), and soiling or other problems with the pickup lens.

• Error code display procedure

Automatic adjustment results

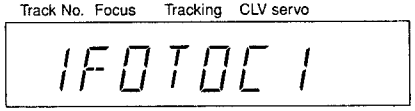
Turn the power ON.
↓
Load the test disc (SZZP1054C).
↓
Hold down the REPEAT button for at least 2 seconds, and then press the STOP button for at least 2 seconds while continuing to hold down the REPEAT button.
↓
A servo section error code is displayed. (See **Table 2.**)
Use this error code display as a guideline for finding the malfunction point in the servo circuitry. If the error code **"E00"** is displayed, the unit is "OK (No problem)."

Checking the mechanism switches

Press the F. SKIP button.
↓
A mechanism OK/NG error code is displayed. (See **Table 1.**)
This error code can be used diagnose whether or not the mechanism is OK. If there are multiple errors, these can be displayed successively by pressing the F. SKIP button.
↓
Remove the disc and turn the power OFF. (The error code display mode is canceled.)

• Servo adjustment procedure

Turn the power ON.
↓
Load the test disc (SZZP1054C).
↓
Hold down the REPEAT button for at least 2 seconds, and then press the PAUSE button for at least 2 seconds while continuing to hold down the REPEAT button.
↓
Press the ▶ (PLAY) button, and play for 10 seconds.
↓
Servo adjustment results are displayed.
Track No. Focus Tracking CLV servo



↓
Remove the disc and turn the power OFF.

(Example)

Normal

	"0" level	"1" level
Focus system	normal	defective
Tracking system	normal	defective
CLV servo system	defective	normal

• Table 1

FL display	Symptom	Cause
H15	When CD tray opens, it closes by itself.	Tray open detect switch (S3) fault.
F15	Does not play, even when CD play button is pressed.	Pickup rest position detection switch (S701) fault.
F16	Disc tray goes on up.	Clump switch (S4) fault.
F17	Disc tray goes on down.	Bottom switch (S5) fault.
F26	Does not move even when " ▶ " (PLAY) button is pressed.	System control or servo processor IC (IC451, IC702) fault.
F27 F28 F29	Tray keeps moving for a while, or selected tray does not open.	Tray position detect switch (S1, S2) fault

- **Table 2 (Error code based troubleshooting)**

✻ The unit is satisfactory if the error code is "**E00**" of "**E02**".

✻ Before testing, check that the test disc is free of scratches and optical pickup is clean.

FL error code display	Symptom	Probable cause	Signal to check		Normal voltage and waveform values	
			Signal name	Location	PLAY	STOP
E01	Focus and tracking offset adjustments not completed in the specified time period.	1. Clocks X1 and X2, power supply VDD and reset/RST, all on IC702. 2. MDATA, MCLK, MLD, and SENSE signals to/from mechanism controller.	MDATA	IC702 ⑧ pin	PLAY 5V 0V T=13.3ms.	4.4 V
			MCLK	IC702 ⑦ pin	PLAY 5V 0V T=13.3ms.	4.3 V
			MLD	IC702 ⑨ pin		4.4 V
			SENSE	IC702 ⑩ pin	—	—
			/RST	IC702 ⑱ pin	4.9 V	4.9 V
			X1	IC702 ⑤⑧ pin	0.8Vp-p F=16.9344MHz	0.8Vp-p F=16.9344MHz
			X2	IC702 ⑤⑨ pin	3.5Vp-p F=16.9344MHz	3.5Vp-p F=16.9344MHz
E03 E05 E07 E09 E0B E0D E0F	Disc play unstable.	1. Scratches or contaminants on disc surface. 2. Focus and Tracking servo circuits (check waveforms, voltages, and part values.) 3. Spindle driver circuit. 4. Optical pickup.	F E	IC702 ㉜ pin	PLAY 0.2Vp-p 2ms. 0.1V/DIV.	2.5 V
			T E	IC702 ㉝ pin	PLAY 0.4Vp-p 2ms. 0.2V/DIV.	2.5 V
			FOD	IC702 ㉘ pin	2.5 V	2.5 V
			TRD	IC702 ㉗ pin	2.5 V	2.5 V
			KICK	IC702 ㉖ pin	2.5 V	2.5 V
			/FLOCK	IC702 ⑪ pin	—	—
			/RF DET	IC702 ㊳ pin	0 V	5.0 V
			R F	TJ701	PLAY 0.9Vp-p 0.5μs. 0.2V/DIV.	1.7 V
			STAT	IC702 ⑰ pin	0.7 V	0 V
E04 E06 E0C E0E	Best "Eye" (PD Balance) adjustment not completed in the specified time period.	1. Scratches or contaminants on disc surface. 2. Focus and Tracking servo circuit (check waveforms, voltages, and part values.) 3. Optical pickup.	FBAL	IC702 ㉚ pin	2.5V	2.5 V
			R F	IC701	PLAY 0.9Vp-p 0.5μs. 0.2V/DIV.	1.7 V
			F E	IC702 ㉜ pin	PLAY 0.2Vp-p 2ms. 0.1V/DIV.	2.5 V
			/TLOCK	IC702 ⑫ pin	—	—
			OFT	IC702 ㊱ pin	0 V	0 V
E08 E0A	Focus or Tracking gain adjustment not completed in the specified time period.	1. Scratches or contaminants on disc surface. 2. Focus and Tracking servo circuit (check waveforms, voltages, and part values.) 3. Optical pickup.	F E	IC702 ㉜ pin	PLAY 0.2Vp-p 2ms. 0.1V/DIV.	2.5 V
			T E	IC702 ㉝ pin	PLAY 0.4Vp-p 2ms. 0.2V/DIV.	2.5 V
			/TLOCK	IC702 ⑫ pin	—	—
			OFT	IC702 ㊱ pin	0 V	0 V

■ Schematic Diagram

Page

A CD SERVO CIRCUIT 22,23
B MOTOR CIRCUIT 24
C CLUMP SWITCH CIRCUIT 24
D BOTTOM/POSITION SWITCH CIRCUIT ... 24
E OPERATION CIRCUIT 24
F MAIN CIRCUIT ..... 24~26

- This schematic diagram may be modified at any time with the development of new technology.

Notes:

- **S1** : Tray position 1 detect switch in "OFF" position
- **S2** : Tray position 2 detect switch in "OFF" position
- **S3** : Tray open detect switch in "OFF" position
- **S4** : Clump switch in "OFF" position
- **S5** : Bottom switch in "OFF" position
- **S601** : Disc direct open switch (DIRECT OPEN DISC 5)
- **S602** : Disc direct open switch (DIRECT OPEN DISC 4)
- **S603** : Disc direct open switch (DIRECT OPEN DISC 3)
- **S604** : Disc direct open switch (DIRECT OPEN DISC 2)
- **S605** : Disc direct open switch (DIRECT OPEN DISC 1)
- **S606** : Disc select switch (DISC 1)
- **S607** : Disc select switch (DISC 2)
- **S608** : Disc select switch (DISC 3)
- **S609** : Disc select switch (DISC 4)
- **S610** : Disc select switch (DISC 5)
- **S611** : Disc tray open/close switch (▲ OPEN/CLOSE)
- **S612** : Pause switch (❚❚)
- **S613** : F. Skip/Search switch (►►/ ►►I)
- **S614** : Play switch (►)
- **S615** : Stop switch (■)
- **S616** : R. Skip/Search switch (I◄◄/◄◄)
- **S617** : Random play switch (RANDOM)
- **S618** : Repeat switch (REPEAT)
- **S619** : CD edit switch (EDIT)
- **S701** : Rest detect switch in "OFF" position

- Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard. Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.

No mark : CD STOP ( ) : CD PLAY [1kHz, L + R, 0 dB]

- Important safety notice:
  Components identified by ⚠ mark have special characteristics important for safety.
  Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.
  When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

- **Caution!**
  IC and LSI are sensitive to static electricity.
  Secondary trouble can be prevented by taking care during repair.
  Cover the parts boxes made of plastics with aluminum foil.
  Ground the soldering iron.
  Put a conductive mat on the work table.
  Do not touch the legs of IC or LSI with the fingers directly.

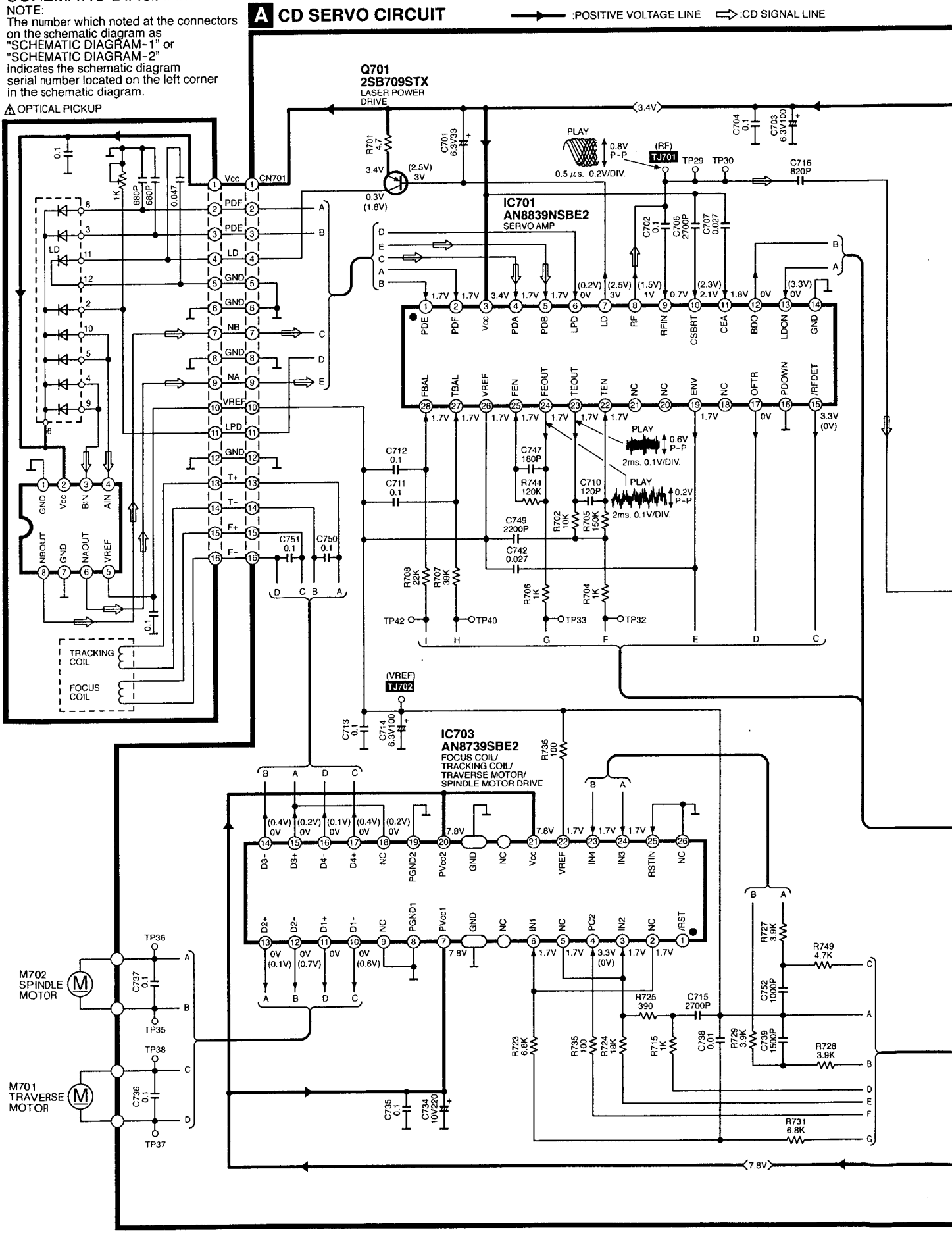
- **Voltage and signal line**

  ▬▶ : Positive voltage line

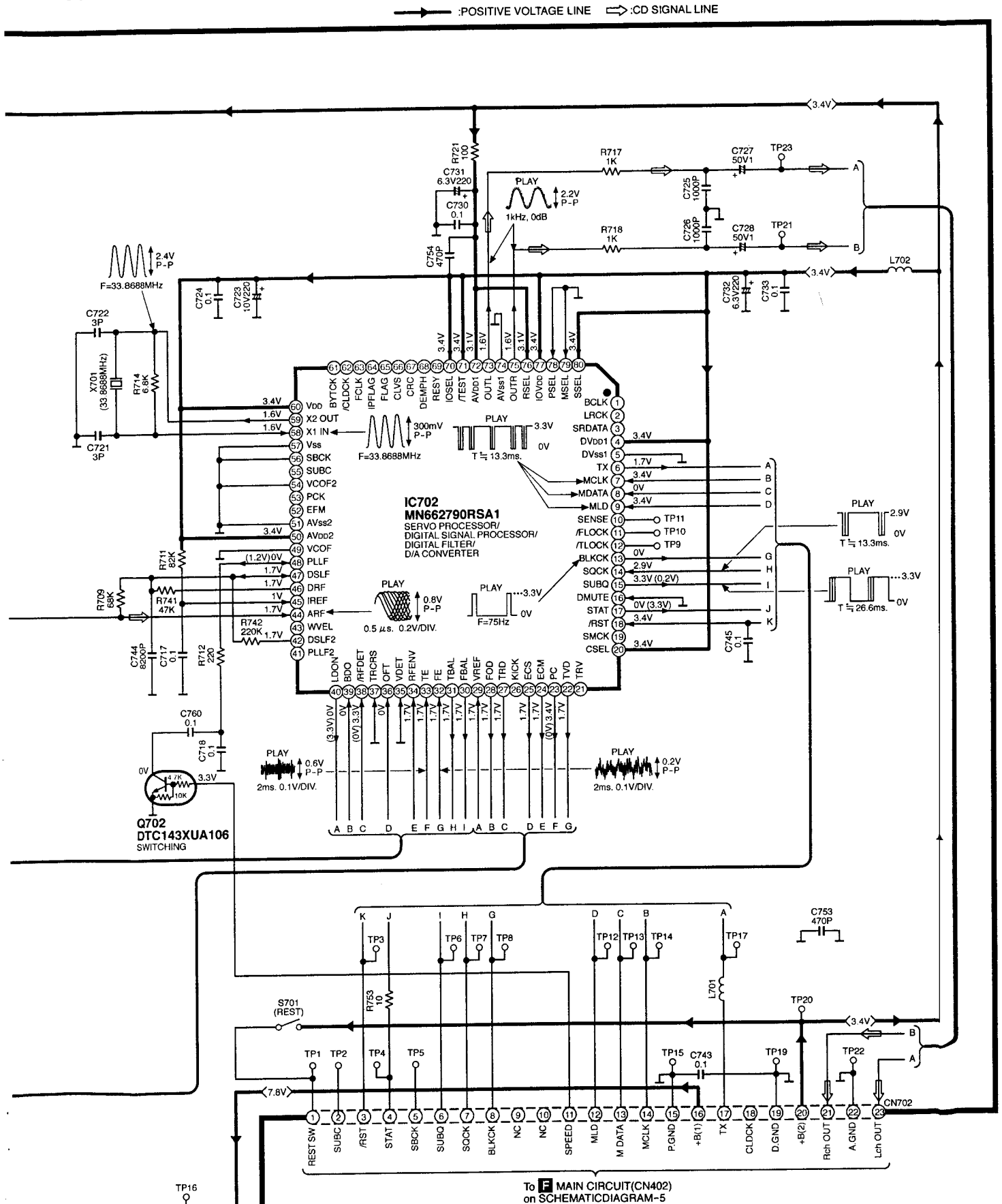
  ⇨ : CD signal line

SCHEMATIC DIAGRAM-1

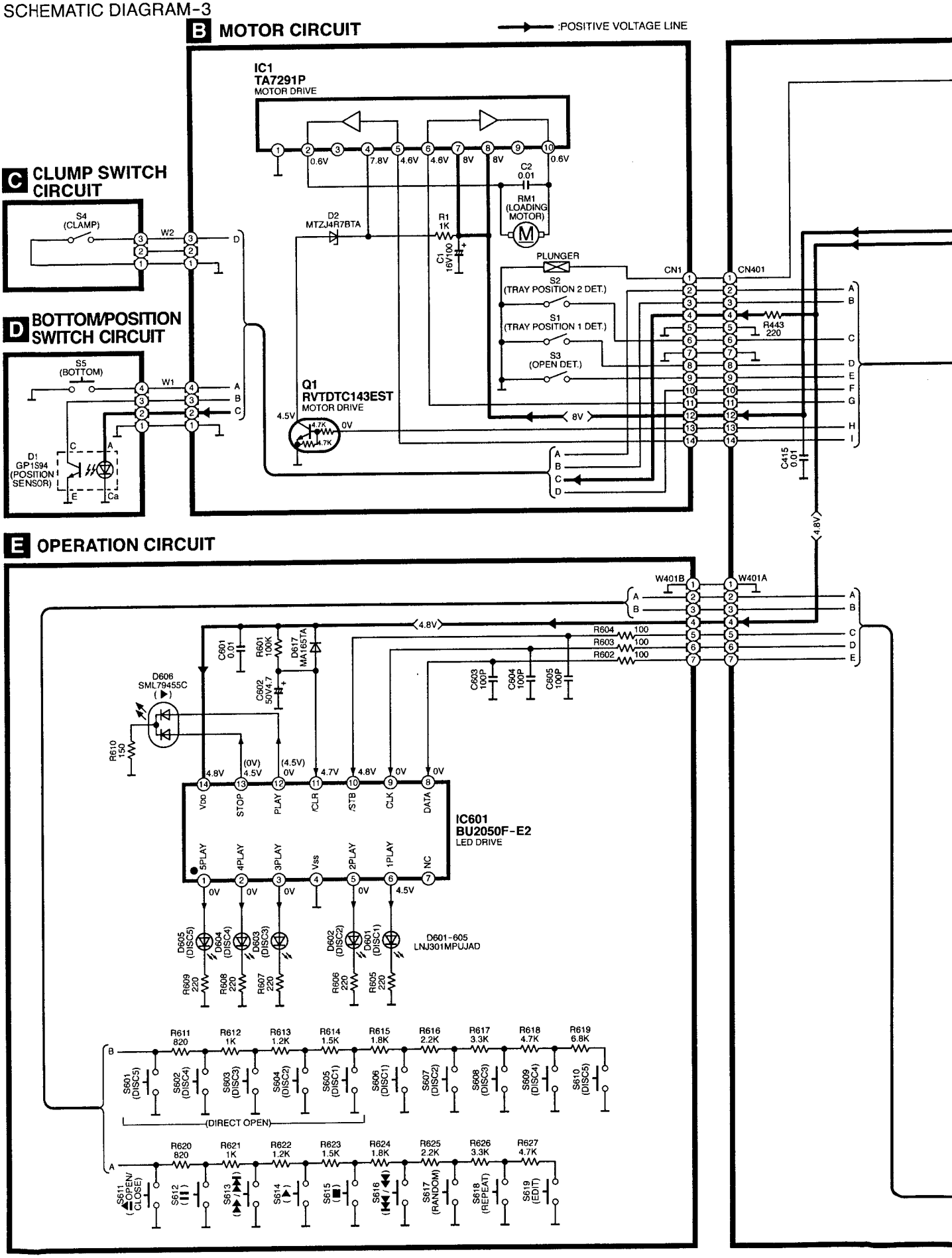
NOTE:
The number which noted at the connectors on the schematic diagram as "SCHEMATIC DIAGRAM-1" or "SCHEMATIC DIAGRAM-2" indicates the schematic diagram serial number located on the left corner in the schematic diagram.



SCHEMATIC DIAGRAM-2



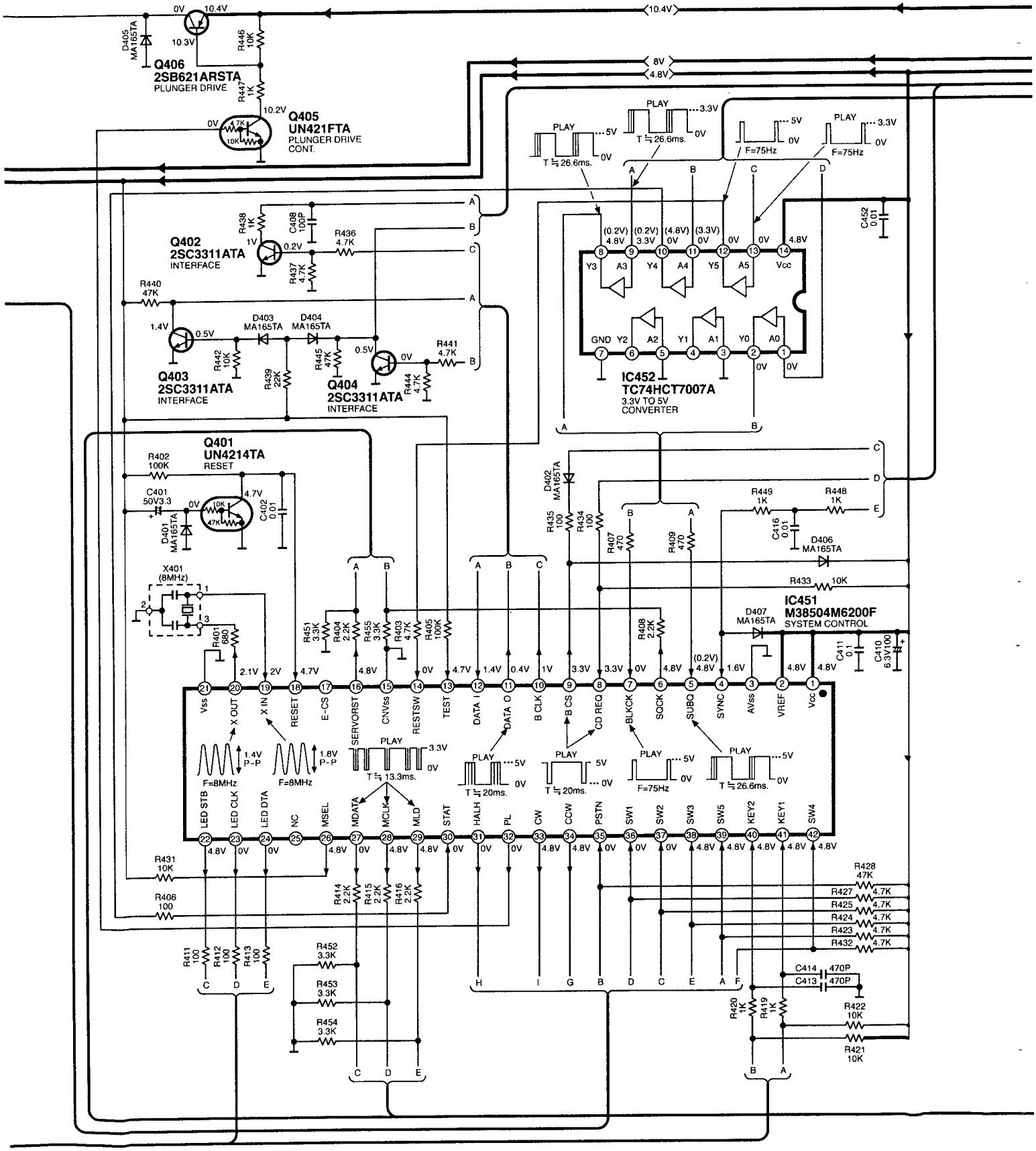
SCHEMATIC DIAGRAM-3



SCHEMATIC DIAGRAM-4

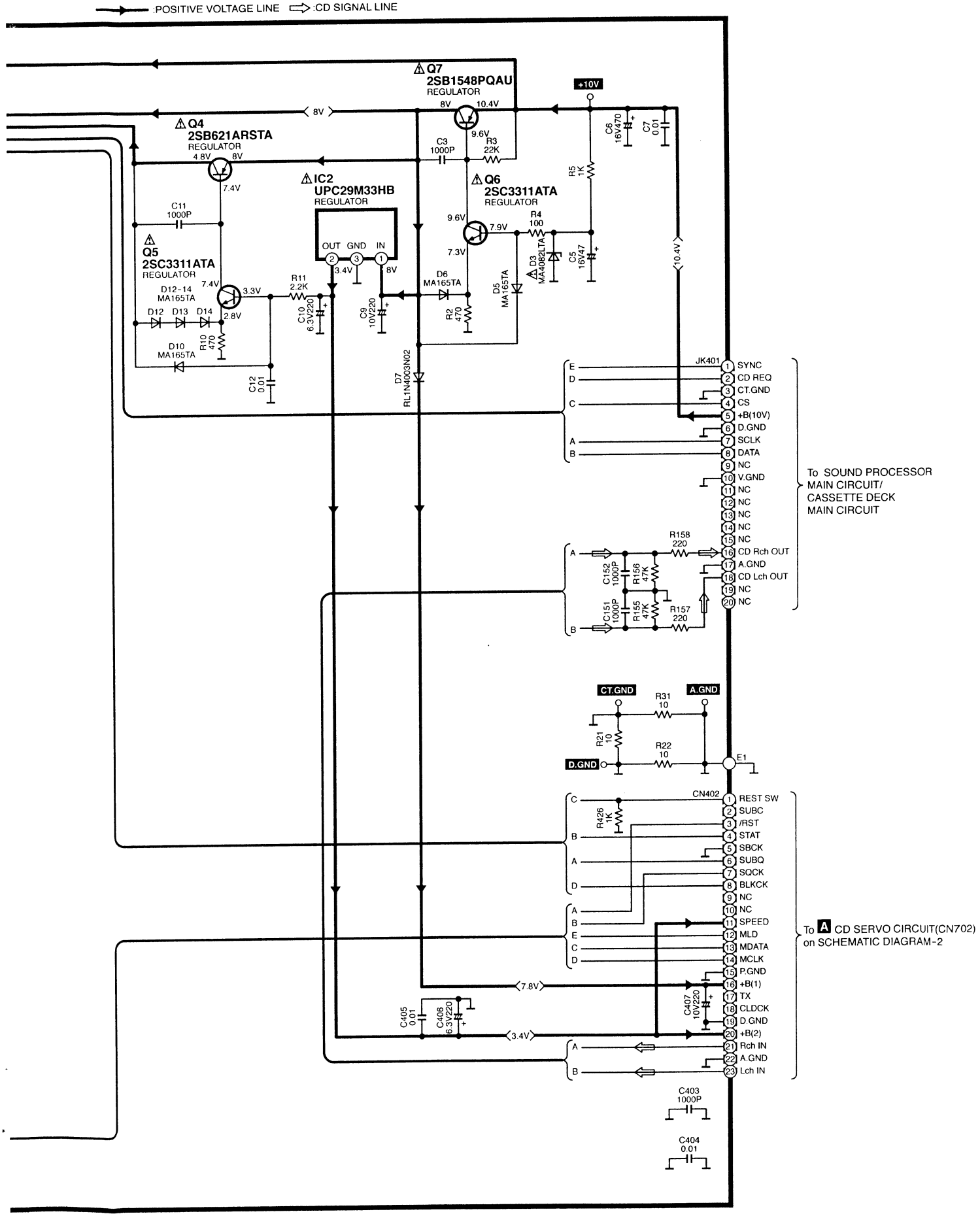
F MAIN CIRCUIT

:POSITIVE VOLTAGE LINE



SCHEMATIC DIAGRAM-5

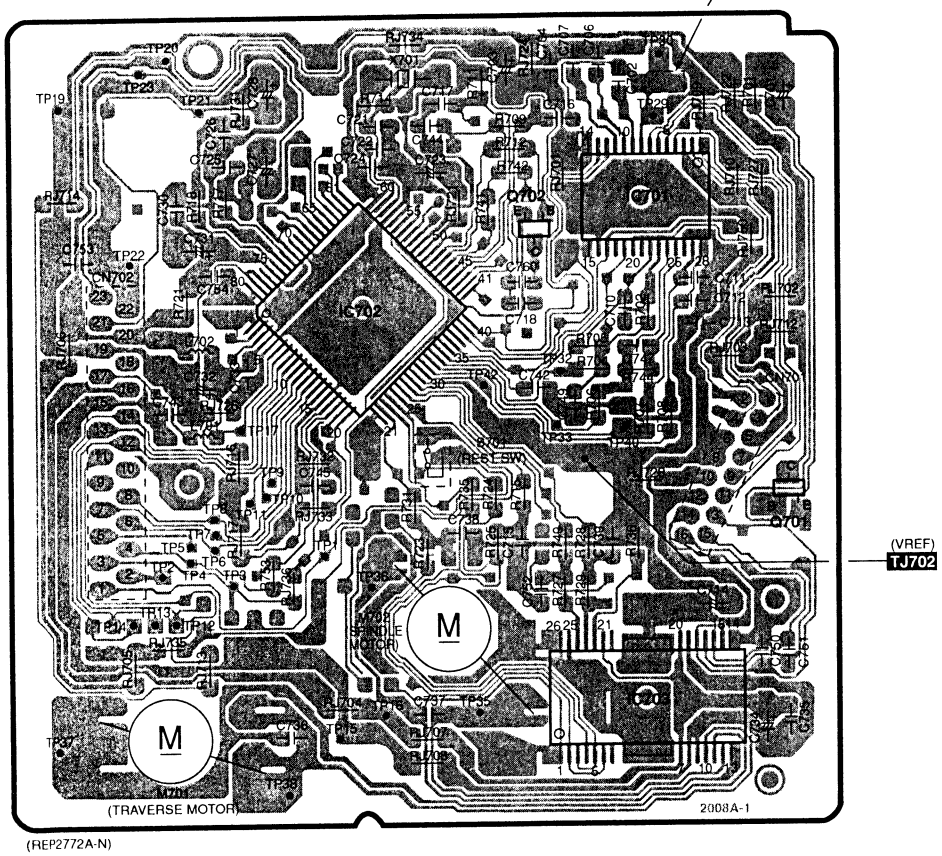
:POSITIVE VOLTAGE LINE :CD SIGNAL LINE



■ Printed Circuit Board Diagram

● This printed circuit board diagram may be modified at any time with the development of new technology.

A CD SERVO P.C.B.

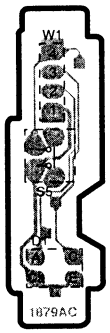


(REP2772A-N)

C CLAMP SW P.C.B.

(REP2578A-N)

D BOTTOM/POSITION SW P.C.B.

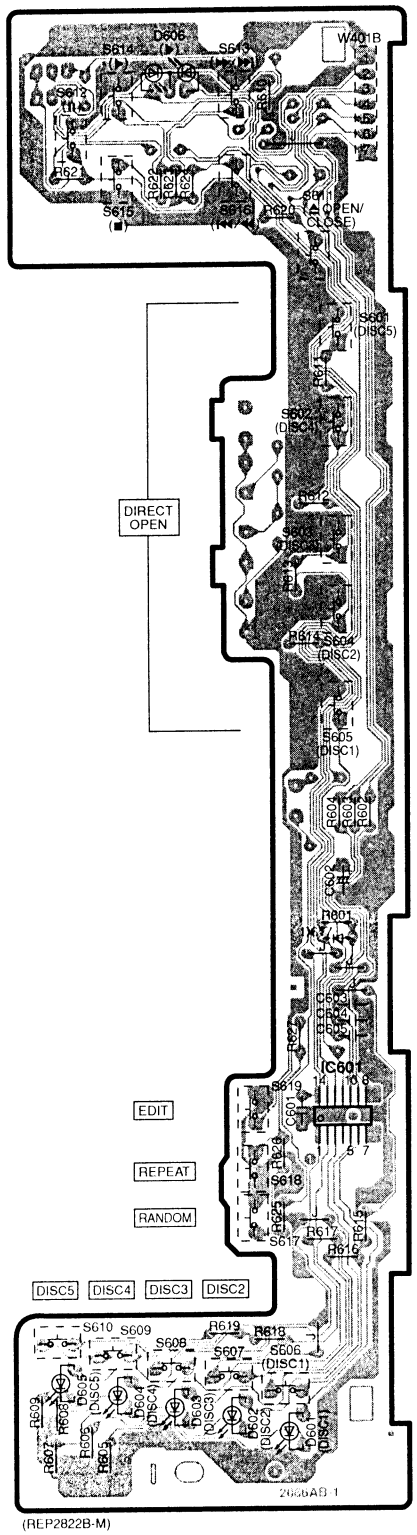


(REP2578A-N)

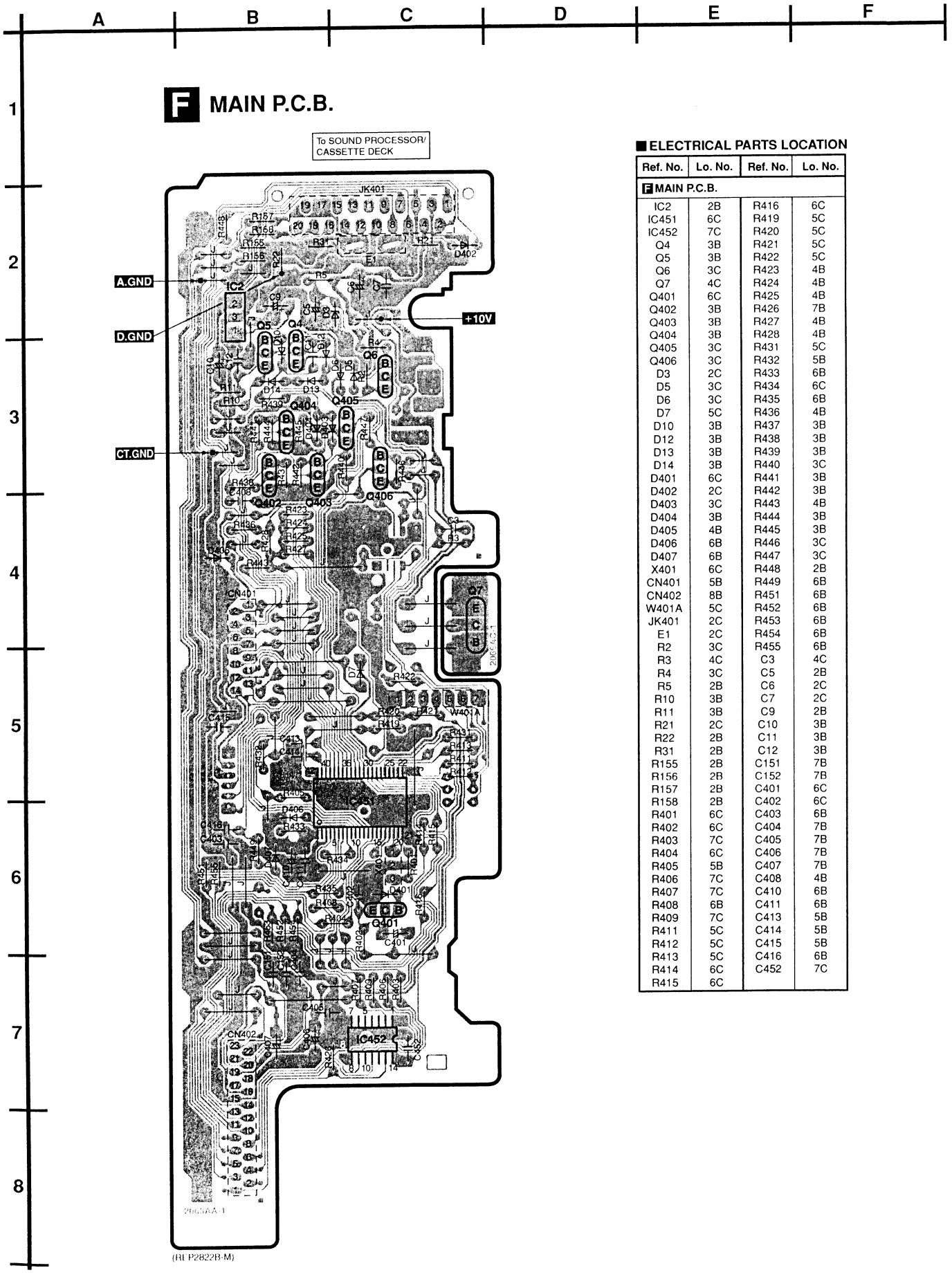
■ ELECTRICAL PARTS LOCATION

Ref. No.	Lo. No.	Ref. No.	Lo. No.
A CD SERVO P.C.B.			
IC701	2D	R753	4B
IC702	3B	RJ701	2C
IC703	4D	RJ702	3D
Q701	3D	RJ703	3D
Q702	2C	RJ704	4B
L701	3B	RJ705	4A
L702	3B	RJ706	3A
X701	1C	RJ707	4C
S701	3C	RJ708	5C
CN701	3D	RJ709	2D
CN702	3A	RJ710	2D
M701	4A	RJ712	3D
M702	4C	RJ713	4B
TJ701	2D	RJ714	2A
TJ702	3C	RJ716	3B
TP1	4B	RJ717	4B
TP2	4A	RJ721	2C
TP3	4B	RJ722	2D
TP4	4B	RJ724	1C
TP5	4B	RJ726	3B
TP6	4B	RJ727	2D
TP7	4B	RJ728	3D
TP8	3B	RJ731	2B
TP9	3B	RJ732	3B
TP10	3B	RJ733	3B
TP11	3B	RJ734	1C
TP12	4A	RJ735	4A
TP13	4A	RJ736	4B
TP14	4A	RJ750	2D
TP15	4B	C701	2D
TP16	4B	C702	2D
TP17	3B	C703	1C
TP19	2A	C704	1C
TP20	1A	C706	1C
TP21	2B	C707	1C
TP22	2A	C710	3D
TP23	1A	C711	2D
TP29	2D	C712	3D
TP30	1D	C713	3D
TP32	3C	C714	4D
TP33	3C	C715	4C
TP35	4C	C716	2C
TP36	4B	C717	2C
TP37	5A	C718	3C
TP38	5B	C721	2B
TP40	3D	C722	2B
TP42	3C	C723	2C
R701	2D	C724	2B
R702	3D	C725	2B
R704	3C	C726	2B
R705	3C	C727	2B
R706	3C	C728	2B
R707	3D	C730	2B
R708	3D	C731	2B
R709	2C	C732	3B
R711	2C	C733	3B
R712	2C	C734	4D
R714	2B	C735	4D
R715	3C	C736	4B
R717	2B	C737	4C
R718	2B	C738	4C
R721	3B	C739	4C
R723	4C	C742	3C
R724	3C	C743	3A
R725	4C	C744	2C
R727	4C	C745	3B
R728	4C	C747	3D
R729	4C	C749	3C
R731	3C	C750	4D
R735	3C	C751	4D
R736	4D	C752	4C
R741	2C	C753	2A
R742	2C	C754	2B
R744	3D	C760	2C
R749	4C		
C CLAMP SW P.C.B.			
S4	7A	W2	6A
D BOTTOM/POSITION SW P.C.B.			
D1	7D	W1	6D
S5	7D		

E OPERATION P.C.B.



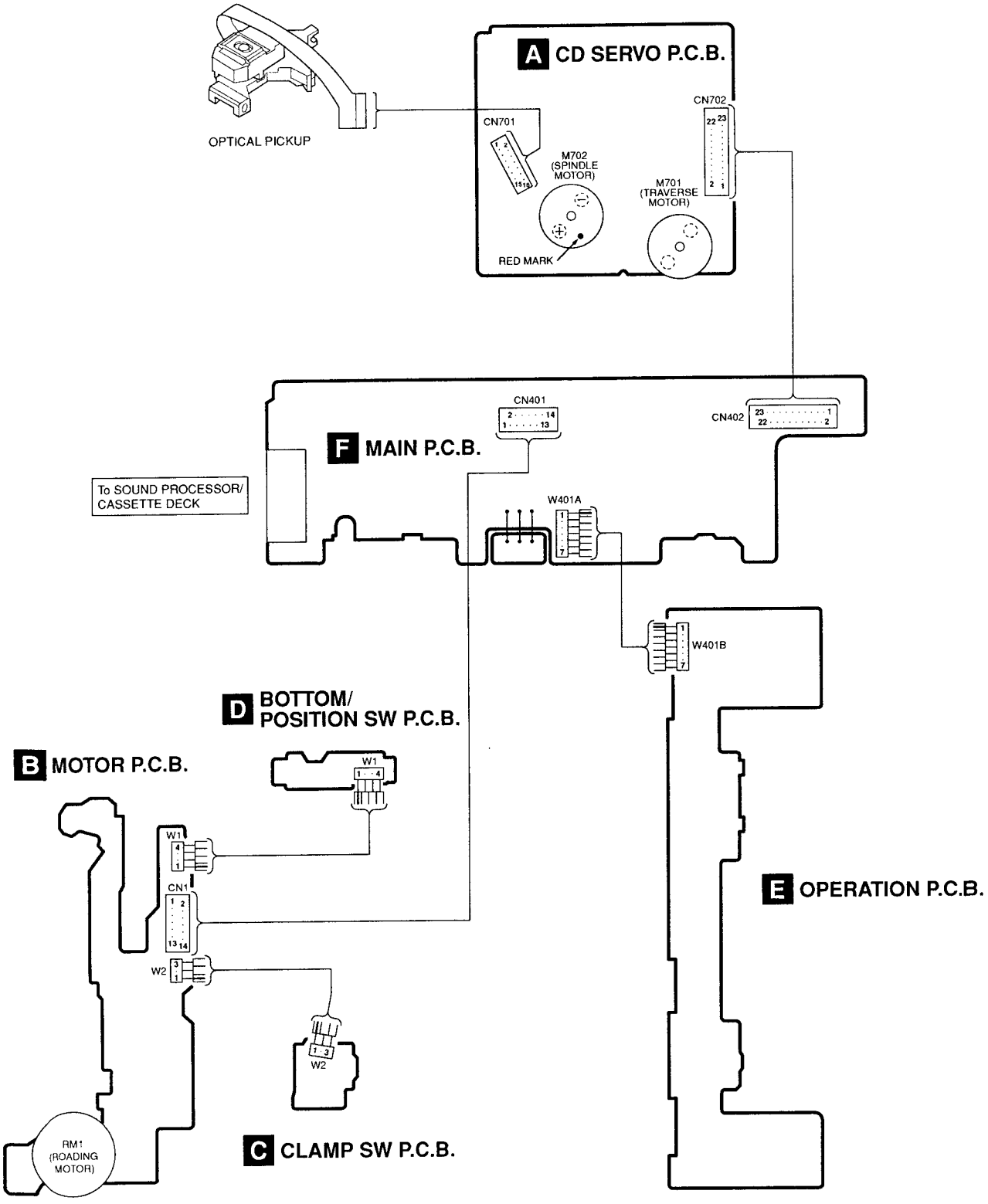
F MAIN P.C.B.



■ ELECTRICAL PARTS LOCATION

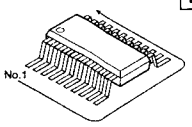
Ref. No.	Lo. No.	Ref. No.	Lo. No.
F MAIN P.C.B.			
IC2	2B	R416	6C
IC451	6C	R419	5C
IC452	7C	R420	5C
Q4	3B	R421	5C
Q5	3B	R422	5C
Q6	3C	R423	4B
Q7	4C	R424	4B
Q401	6C	R425	4B
Q402	3B	R426	7B
Q403	3B	R427	4B
Q404	3B	R428	4B
Q405	3C	R431	5C
Q406	3C	R432	5B
D3	2C	R433	6B
D5	3C	R434	6C
D6	3C	R435	6B
D7	5C	R436	4B
D10	3B	R437	3B
D12	3B	R438	3B
D13	3B	R439	3B
D14	3B	R440	3C
D401	6C	R441	3B
D402	2C	R442	3B
D403	3C	R443	4B
D404	3B	R444	3B
D405	4B	R445	3B
D406	6B	R446	3C
D407	6B	R447	3C
X401	6C	R448	2B
CN401	5B	R449	6B
CN402	8B	R451	6B
W401A	5C	R452	6B
JK401	2C	R453	6B
E1	2C	R454	6B
R2	3C	R455	6B
R3	4C	C3	4C
R4	3C	C5	2B
R5	2B	C6	2C
R10	3B	C7	2C
R11	3B	C9	2B
R21	2C	C10	3B
R22	2B	C11	3B
R31	2B	C12	3B
R155	2B	C151	7B
R156	2B	C152	7B
R157	2B	C401	6C
R158	2B	C402	6C
R401	6C	C403	6B
R402	6C	C404	7B
R403	7C	C405	7B
R404	6C	C406	7B
R405	5B	C407	7B
R406	7C	C408	4B
R407	7C	C410	6B
R408	6B	C411	6B
R409	7C	C413	5B
R411	5C	C414	5B
R412	5C	C415	5B
R413	5C	C416	6B
R414	6C	C452	7C
R415	6C		

■ Wiring Connection Diagram

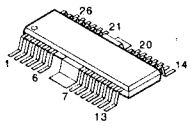


■ Type Illustration of IC's, Transistors and Diodes

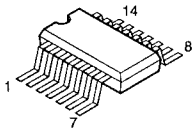
AN8839NSBE2	28PIN
BU2050F-E2	14PIN
M38504M6200F	42PIN



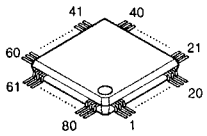
AN8739SBE2



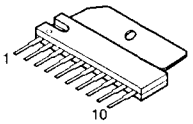
TC74HCT7007A



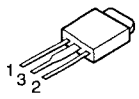
M662790RSA1



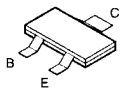
TA7291P



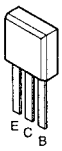
UPC29M33HB



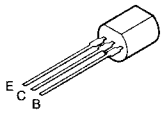
2SB709STX
DTC143XUA106



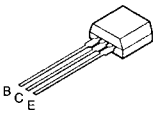
2SC3311ATA
UN421FTA
UN4214TA



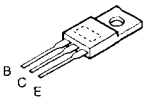
2SB621ARSTA



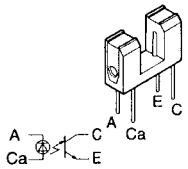
RVTDTC143EST



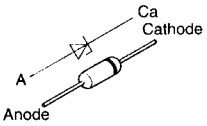
2SB1548PQAU



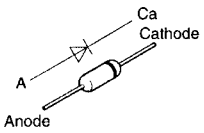
GP1S94



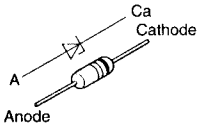
MTZJ4R7BTA



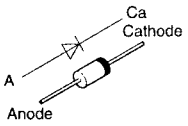
MA165TA



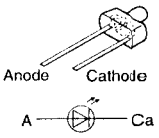
MA4082LTA



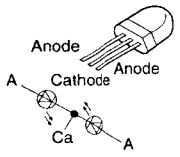
RL1N4003N02



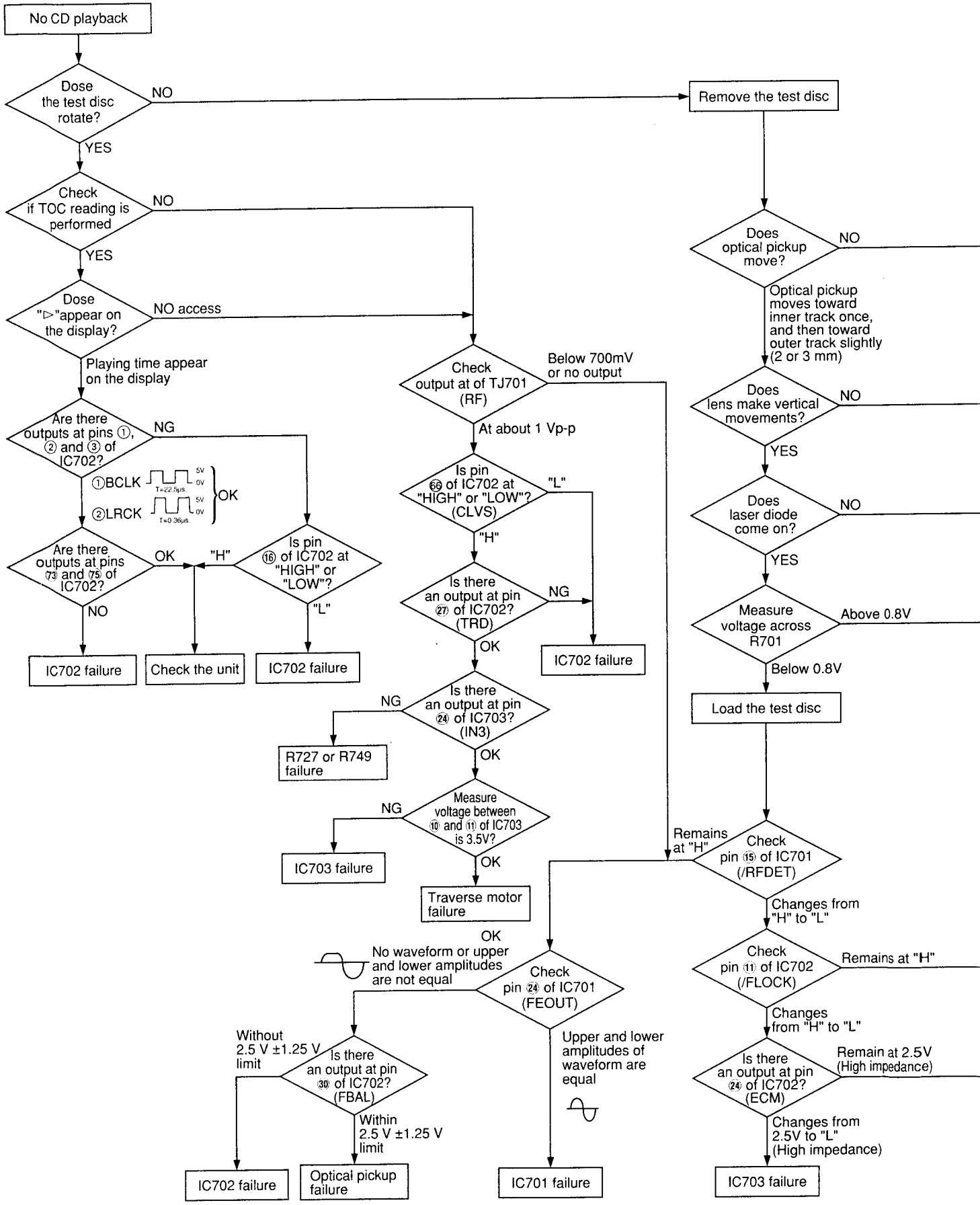
LNJ301MPUJAD

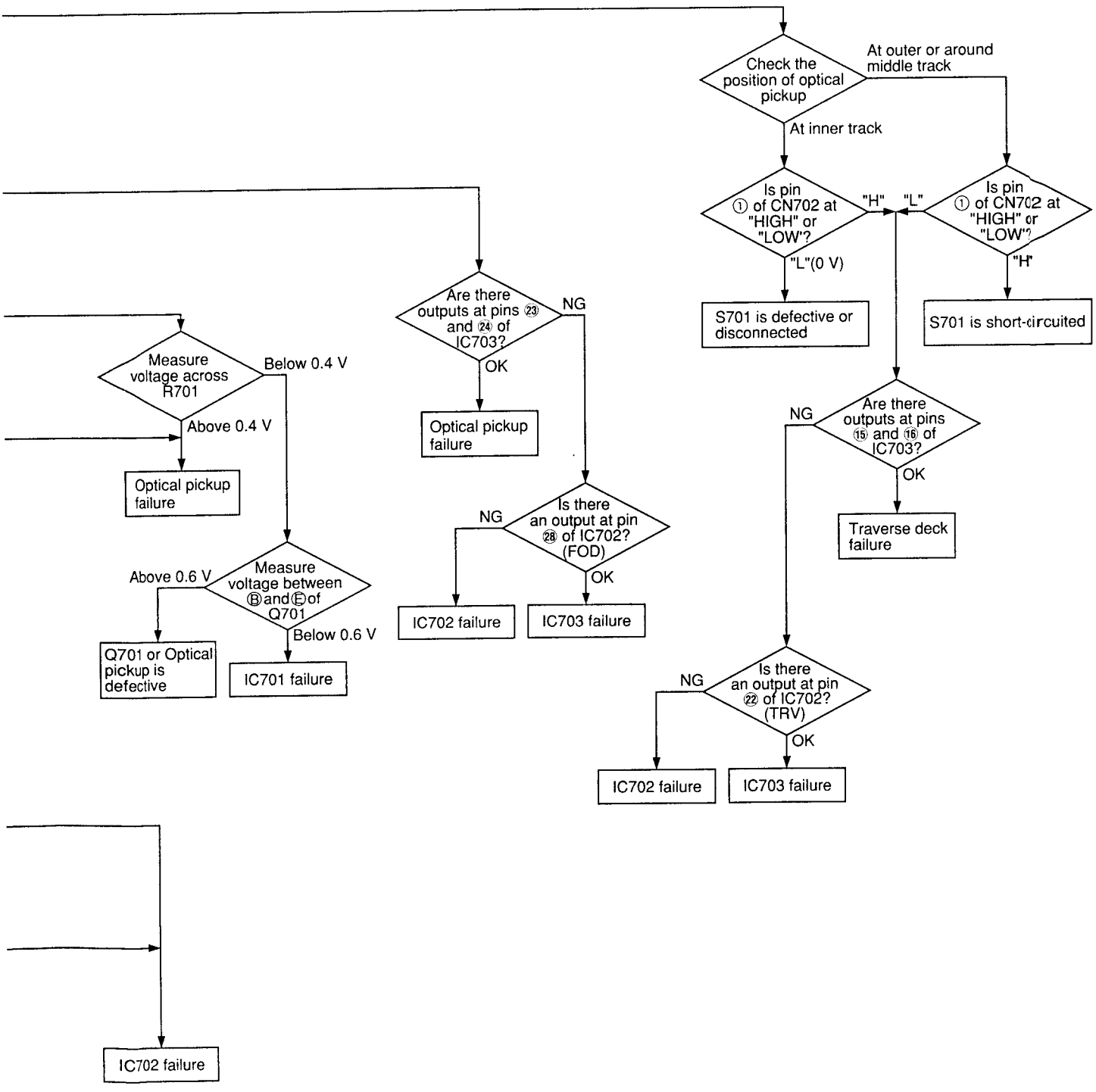


SML79455C

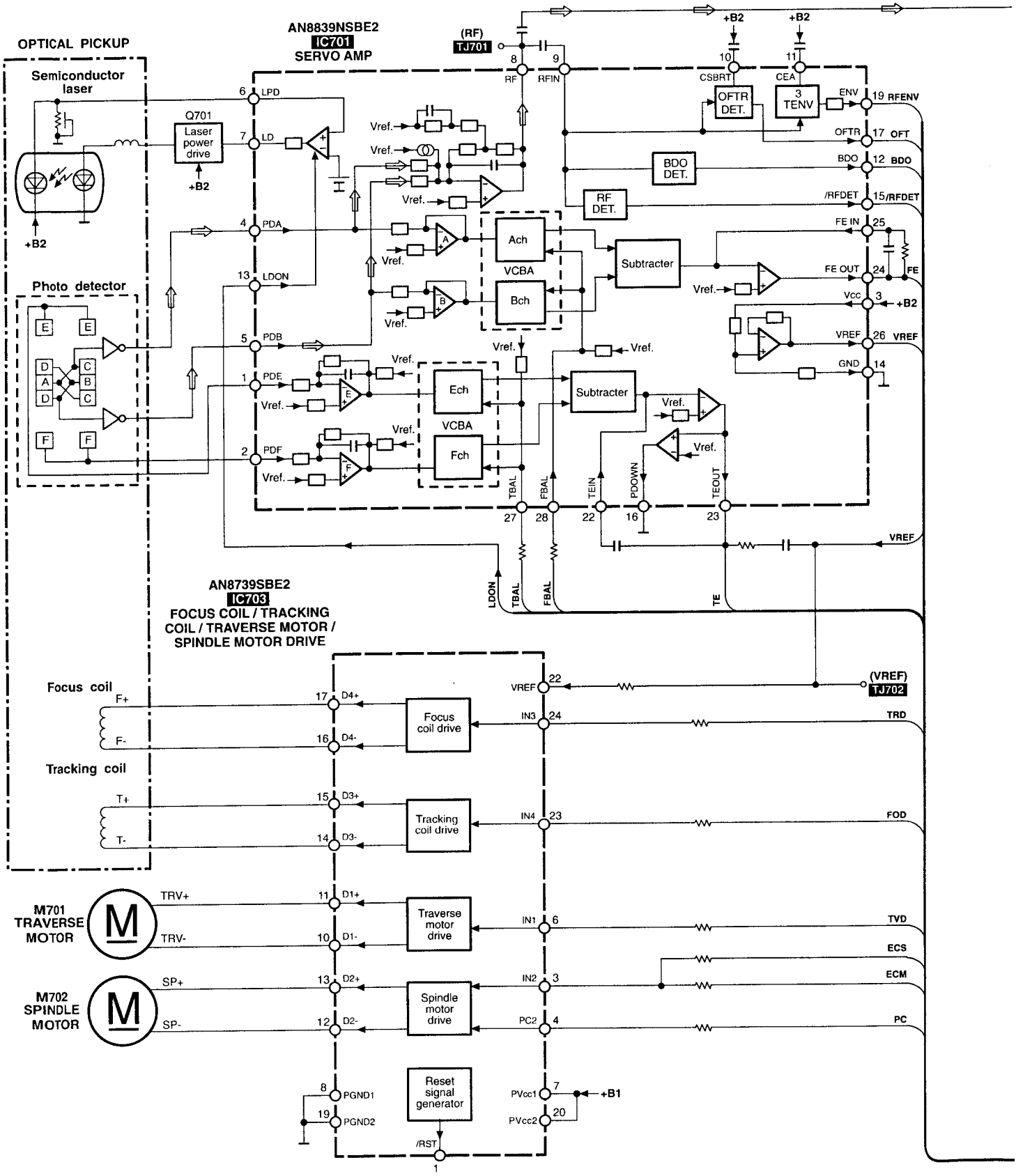


■ Troubleshooting Guide

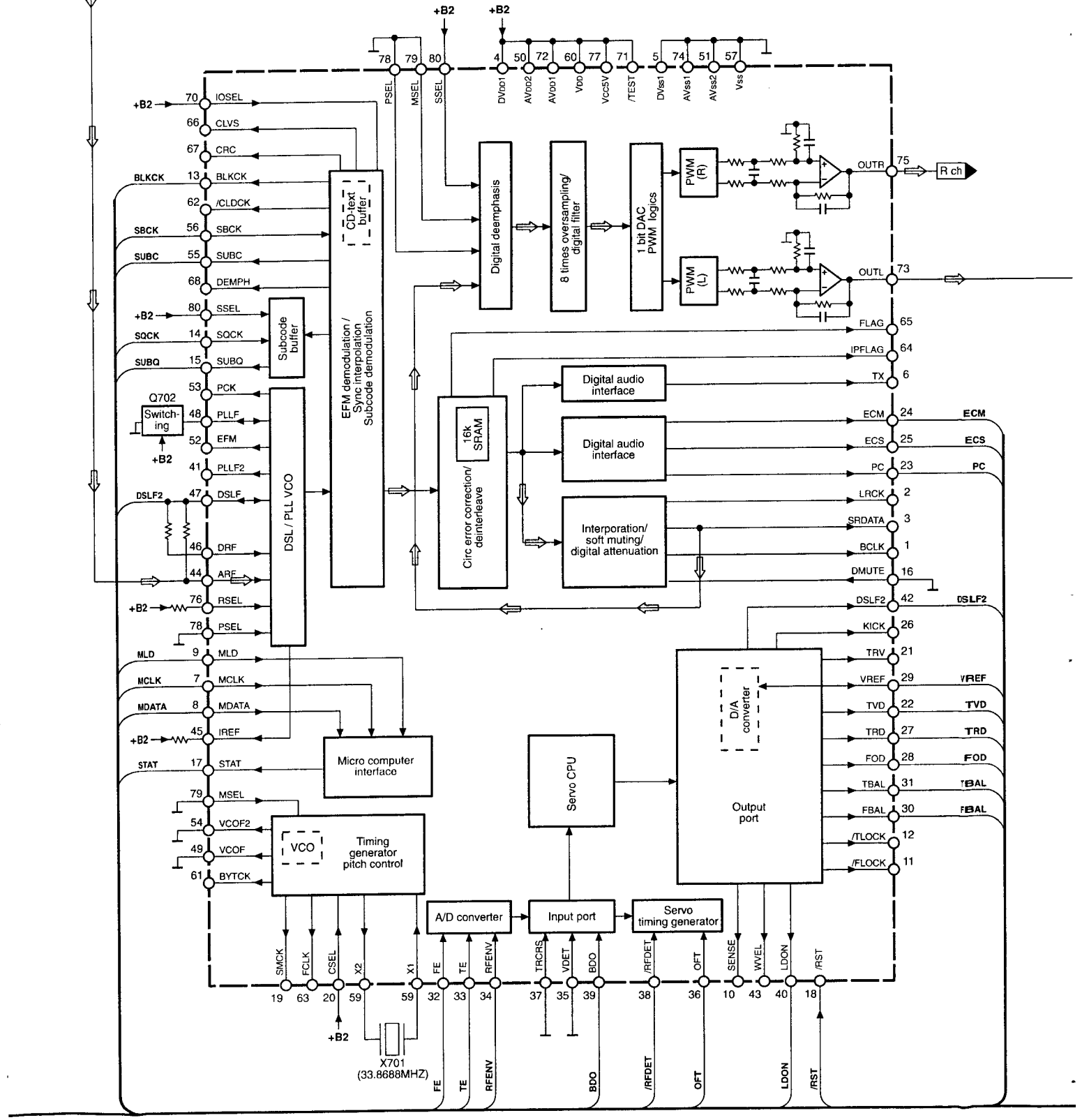


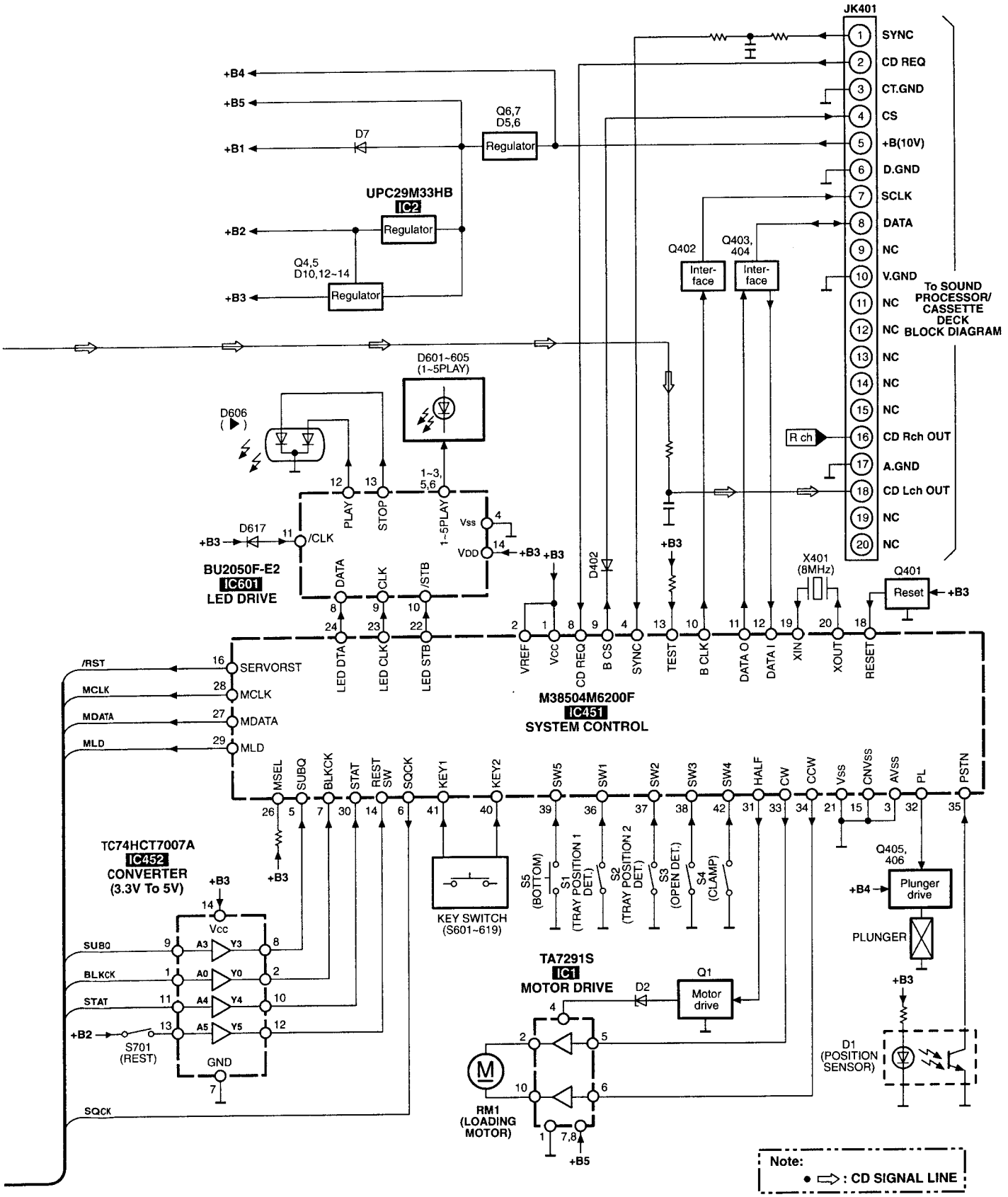

Check the position of optical pickup
At outer or around middle track
At inner track
Is pin ① of CN702 at "HIGH" or "LOW"?
"H"
"L"
Is pin ① of CN702 at "HIGH" or "LOW"?
"L"(0 V)
"H"
S701 is defective or disconnected
S701 is short-circuited
Are there outputs at pins ㉓ and ㉔ of IC703?
NG
OK
Optical pickup failure
Measure voltage across R701
Below 0.4 V
Above 0.4 V
Optical pickup failure
Is there an output at pin ㉘ of IC702? (FOD)
NG
OK
IC702 failure
IC703 failure
Measure voltage between Ⓑ and Ⓔ of Q701
Above 0.6 V
Below 0.6 V
Q701 or Optical pickup is defective
IC701 failure
Are there outputs at pins ⑮ and ⑯ of IC703?
NG
OK
Traverse deck failure
Is there an output at pin ㉒ of IC702? (TRV)
NG
OK
IC702 failure
IC703 failure
IC702 failure

■ Block Diagram



MN662790RSA
IC702
SERVO PROCESSOR / DIGITAL SIGNAL PROCESSOR
DIGITAL FILTER / D/A CONVERTER




JK401
SYNC
CD REQ
CT.GND
CS
+B(10V)
D.GND
SCLK
DATA
NC
V.GND
NC
NC
NC
NC
R ch
CD Rch OUT
A.GND
CD Lch OUT
NC
NC
To SOUND PROCESSOR/ CASSETTE DECK BLOCK DIAGRAM
+B4
+B5
+B1
D7
Q6,7
D5,6
Regulator
UPC29M33HB
IC2
+B2
Regulator
Q4,5
D10,12-14
+B3
Regulator
Q402
Inter-face
Q403, 404
Inter-face
D601~605
(1~5PLAY)
D606
(▶)
PLAY
STOP
1~3, 5,6
1-5PLAY
D617
+B3
/CLK
Vss
VDD
+B3
BU2050F-E2
IC601
LED DRIVE
DATA
CLK
/STB
D402
+B3
X401
(8MHz)
Q401
Reset
+B3
LED DTA
LED CLK
LED STB
VREF
Vcc
CD REQ
B CS
SYNC
TEST
B CLK
DATA O
DATA I
XIN
XOUT
RESET
/RST
MCLK
MDATA
MLD
SERVORST
MCLK
MDATA
MLD
M38504M6200F
IC451
SYSTEM CONTROL
MSEL
SUBQ
BLKCK
STAT
REST SW
SQCK
KEY1
KEY2
SW5
SW1
SW2
SW3
SW4
HALF
CW
CCW
Vss
CNVss
AVss
PL
PSTN
TC74HCT7007A
IC452
CONVERTER
(3.3V To 5V)
+B3
+B3
Vcc
SUBQ
BLKCK
STAT
+B2
S701
(REST)
GND
SQCK
KEY SWITCH
(S601~619)
S5 (BOTTOM)
S1 (TRAY POSITION 1 DET.)
S2 (TRAY POSITION 2 DET.)
S3 (OPEN DET.)
S4 (CLAMP)
Q405, 406
+B4
Plunger drive
PLUNGER
+B3
TA7291S
IC1
MOTOR DRIVE
D2
Q1
Motor drive
RM1
(LOADING MOTOR)
+B5
D1
(POSITION SENSOR)
Note:
• ⇨ : CD SIGNAL LINE

■ Terminal Function of IC's

• IC701 (AN8839NSBE2): SERVO AMP

No.	Mark	I/O Division	Function
1	PDE	I	Tracking signal input terminal 1 (E ch)
2	PDF	I	Tracking signal input terminal 2 (F ch)
3	Vcc	I	Power supply terminal
4	PDA	I	Focus signal input terminal 1 (A ch)
5	PDB	I	Focus signal input terminal 2 (B ch)
6	LPD	I	Laser PD signal
7	LD	O	Laser power auto control output
8	RF	O	RF amp terminal
9	RFIN	I	AGC input terminal
10	CSBRT	I	OFTR capacitor connection terminal
11	CEA	I	HPF-AMP capacitor connection terminal
12	BDO	O	Dropout detection control
13	LDON	I	LD APC ON/OFF ("H": ON, "L": OFF)
14	GND	—	GND terminal

No.	Mark	I/O Division	Function
15	/RFDET	O	RF det. signal output terminal ("L": det.)
16	PDOWN	–	Power down terminal
17	OFTR	O	Off track detection ("H": det.)
18	NC	–	Not used, open
19	ENV	O	Envelope signal output terminal
20	NC	–	Not used, open
21	NC	–	Not used, open
22	TEN	I	Tracking error signal
23	TEOUT	O	Tracking error signal
24	FEOUT	O	Focus error signal
25	FEN	I	Focusing error signal
26	VREF	O	Reference voltage output terminal
27	TBAL	I	Tracking balance adj. input
28	FBAL	I	Focus balance adj. input

• IC703 (AN8739SBE2): FOCUS COIL / TRACKING COIL / TRAVERSE MOTOR / SPINDLE MOTOR DRIVE

No.	Mark	I/O Division	Function
1	/RST	—	Not used, open
2	NC	—	———
3	IN2	I	Motor driver (2) input
4	PC2	I	Turntable motor drive signal ("L": ON)
5	NC	—	Not used, open
6	IN1	I	Motor driver (1) input
7	$PV_{CC}1$	I	Driver power supply terminal (1)
8	PGND1	—	Driver GND terminal (1)
9	NC	—	Not used, connected to GND
10	D1–	O	Motor driver (1) output terminal (–)
11	D1+	O	Motor driver (1) output terminal (+)
12	D2–	O	Motor driver (2) output terminal (–)
13	D2+	O	Motor driver (2) output terminal (+)

No.	Mark	I/O Division	Function
14	D3–	O	Motor driver (3) output terminal (–)
15	D3+	O	Motor driver (3) output terminal (+)
16	D4–	O	Motor driver (4) output terminal (–)
17	D4+	O	Motor driver (4) output terminal (+)
18	NC	—	Not used, open
19	PGND2	—	Driver GND terminal (2)
20	$PV_{CC}2$	I	Driver power supply terminal (2)
21	Vcc	I	Power supply terminal
22	VREF	I	Reference voltage input terminal
23	IN4	I	Motor driver (4) input
24	IN3	I	Motor driver (3) input
25	RSTIN	I	Reset terminal (Not used, connected to GND)
26	NC	—	Not used, connected to GND

SL-EH750

• IC702 (MN662790RSA): SERVO PROCESSOR / DIGITAL SIGNAL PROCESSOR / DIGITAL FILTER / D/A CONVERTER

No.	Mark	I/O Division	Function
1	BCLK	O	Serial bit clock output (Not used, open)
2	LRCK	O	L/R discriminating signal output (Not used, open)
3	SRDATA	O	Serial data (Not used, open)
4	$DV_{DD}1$	I	Power supply (digital circuit) terminal
5	$DV_{SS}1$	—	GND (digital circuit) terminal
6	TX	O	Digital audio interface signal
7	MCLK	I	Command clock signal
8	MDATA	I	Command data signal
9	MLD	I	Command load signal ("L": LOAD)
10	SENSE	O	Sense signal (OFT, FESL, NACEND, NAJEND, POSAD, SFG) (Not used, open)
11	/FLOCK	O	Optical servo condition (focus) ("L": lead-in) (Not used, open)
12	/TLOCK	O	Optical servo condition (tracking) ("L": lead-in) (Not used, open)
13	BLKCK	O	Sub-code block clock (f=75Hz)
14	SQCK	I	Sub-code Q register clock
15	SUBQ	O	Sub-code Q data
16	DMUTE	—	Muting input ("H": MUTE) (Not used, connected to GND)
17	STAT	O	Status signal (CRC, CUE, CLVS, TTSTOP, FCLV, SQCK)
18	/RST	I	Reset signal ("L": reset)
19	SMCK	—	System clock (f=4.2336MHz) (Not used, open)
20	CSEL	I	Frequency control terminal of crystal oscillator (Connected to V_{DD})
21	TRV	O	Traverse servo control (Not used, open)
22	TVD	O	Traverse drive signal

No.	Mark	I/O Division	Function
23	PC	O	Turntable motor drive signal ("L": ON)
24	ECM	O	Turntable motor drive signal (Forced mode)
25	ECS	O	Turntable motor drive signal (Servo error signal)
26	KICK	O	Kick pulse output (Not used, open)
27	TRD	O	Tracking drive signal output
28	FOD	O	Focus drive signal output
29	VREF	I	D/A drive output (TVD, ECS, TRD, FOD, FBAL, TBAL) normal voltage input terminal
30	FBAL	O	Focus balance adj. output
31	TBAL	O	Tracking balance adj. output
32	FE	I	Focus error signal (analog input)
33	TE	I	Tracking error signal (analog input)
34	RFENV	I	RF envelope signal
35	VDET	I	Oscillation det. signal ("H": det.) (Not used, open)
36	OFT	I	Off track signal ("H": Off track)
37	TRCRS	I	Track cross signal input (Not used, open)
38	/RFDET	I	RF detection signal ("L": detection)
39	BDO	I	Dropout detection signal ("H": dropout)
40	LDON	O	Laser power control ("H": ON)
41	PLLF2	–	PLL loop filter terminal (Not used, open)
42	DSLF2	I/O	DSL loop filter terminal
43	WVEL	O	Double velocity status signal ("H": double) (Not used, open)
44	ARF	I	RF signal input

No.	Mark	I/O Division	Function
45	IREF	I	Reference current input
46	DRF	I	DSL bias terminal
47	DSLF	I/O	DSL loop filter terminal
48	PLLF	I/O	PLL loop filter terminal
49	VCOF	–	VCO loop filter terminal (Not used, connected to GND)
50	$AV_{DD}2$	I	Power supply (analog circuit) terminal 2
51	$AV_{SS}2$	—	GND (analog circuit) terminal
52	EFM	–	EFM signal (Not used, open)
53	PCK	–	PLL extract clock (f=4.3218MHz) (Not used, open)
54	VCOF2	–	VCO loop filter terminal (Not used, connected to GND)
55	SUBC	O	Sub-code serial output clock
56	SBCK	I	Sub-code serial input data
57	V_{SS}	—	GND terminal
58	X1 IN	I	Crystal oscillator terminal (f=33.8688MHz)
59	X2 OUT	O	
60	V_{DD}	I	Power supply terminal
61	BYTCK	–	Byte clock signal (Not used, open)
62	/CLDCK	O	Sub-code frame clock signal (f=CLDCK=7.35kHz: Normal)
63	FCLK	–	Crystal frame clock (Not used, open)
64	IPFLAG	–	Interpolation flag terminal (Not used, open)

No.	Mark	I/O Division	Function
65	FLAG	–	Flag terminal (Not used, open)
66	CLVS	–	Turntable servo phase synchro signal ("H": CLV, "L": Rough servo) (Not used, open)
67	CRC	–	Sub-code CRC check terminal ("H": ON, "L": NG) (Not used, open)
68	DEMPH	–	De-emphasis ON signal ("H": ON) (Not used, open)
69	RESY	–	Re-synchronizing signal of frame sync. (Not used, open)
70	IOSEL	–	I/O select signal input (Connected to V_{DD})
71	/TEST	I	Test terminal (Normal: "H") (Not used, connected to power supply)
72	$AV_{DD}1$	I	Power supply (analog circuit) terminal (1)
73	OUTL	O	L ch audio signal
74	$AV_{SS}1$	—	GND (analog circuit) terminal (1)
75	OUTR	O	R ch audio signal
76	RSEL	I	Polarity direction control terminal of RF signal (Not used, connected to power supply)
77	IOV_{DD}	I	Power supply terminal
78	PSEL	I	Test terminal (Normal: "L") (Connected to GND)
79	MSEL	I	Output frequency select signal input (Not used, connected to GND)
80	SSEL	I	SUBQ terminal output mode select signal input ("H": Q code buffer mode) (Connected to V_{DD})

• IC451 (M38504M6200F) : System Control

Pin No.	Terminal Name	I/O	Function
1	Vcc	—	Power supply terminal
2	VREF	I	Reference voltage input
3	AVss	–	GND terminal
4	SYNC	I	Power failure detect signal input
5	SUBQ	I	Sub-code Q data signal input
6	SQCK	O	Sub-code Q resistor clock signal output
7	BLKCK	I	Block clock signal input
8	CD REQ	I	Serial communication signal to Sound Processor (Request signal input)
9	B CS	O	Serial communication signal to Sound Processor (Chip select signal output)
10	B CLK	O	Serial communication signal to Sound Processor (Clock signal output)
11	DATA O	O	Serial communication signal to Sound Processor (Data signal output)
12	DATA I	I	Serial communication signal to Sound Processor (Data signal input)
13	TEST	I	Test mode select signal input (Connected to Vcc via resistor)
14	RESTSW	I	Rest switch signal input
15	CNVss	–	Connected to Vss
16	SERVORST	O	Reset signal output for CD servo IC
17	E-CS	–	EEPROM serial communication signal (Not used, open)
18	RESET	I	Reset signal input
19	X IN	I	Oscillator connected terminal (8 MHz)
20	X OUT	O	
21	Vss	–	GND terminal

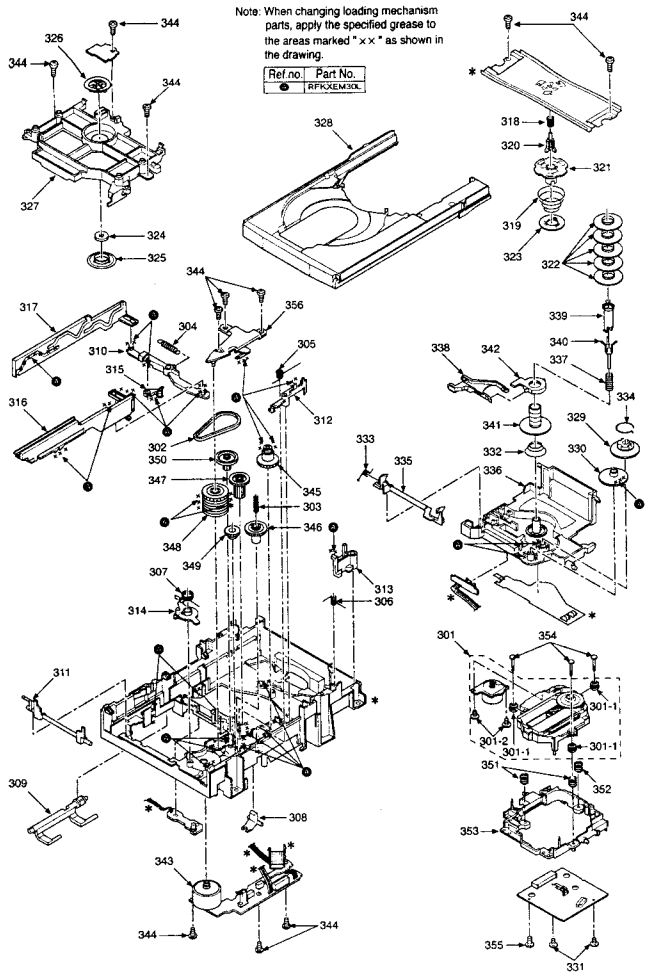
Pin No.	Terminal Name	I/O	Function
22	LED STB	O	LED serial strobe signal output
23	LED CLK	O	LED serial clock signal output
24	LED DATA	O	LED serial data signal output
25	NC	–	Not used, open
26	MSEL	I	Function select signal input (Connected to Vcc via resistor)
27	MDATA	O	Command data output
28	MCLK	O	Command clock output
29	MLD	O	Command load output
30	STAT	I	Status signal input
31	HALH	O	CD mechanism motor speed control signal output
32	PL	O	CD mechanism solenoid control signal output
33	CW	O	CD mechanism motor control signal output (forward direction)
34	CCW	O	CD mechanism motor control signal output (reverse direction)
35	PSTN	I	Position sensor detect signal input
36	SW1	I	Disc tray position 1 detect signal input
37	SW2	I	Disc tray position 2 detect signal input
38	SW3	I	Disc tray open detect signal input
39	SW5	I	Bottom switch detect signal input
40	KEY2	I	Operation key signal input
41	KEY1	I	Operation key signal input
42	SW4	I	Clump switch detect signal input

■ Replacement Parts List

Notes: * Important safety notice:
Components identified by ⚠ mark have special characteristics important for safety. Furthermore, special parts which have purposes of fire-(resistors), etc. are used. When replacing any of components, be sure to use only manufacture's specified parts shown in the parts list.
* ALL parts are supplied by MESA.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	RKM0399-S	TOP CABINET	1	
2	RHD30007-K1	SCREW	4	
3	XTBS3+8JFZ1	SCREW	1	
4	REZ1200	FFC	1	
5	REZ1201	FFC	1	
6	RYF0520-S	CD LID ASS'Y	1	
7	XTW3+8T	SCREW	2	
8	RKA0105-K	RUBBER	4	
9	RKA0106-N	RING	4	
10	RYP0896-S	FRONT PANEL	1	
10-1	RGB0025-A	TECHNICS BADGE	1	
11	XTBS3+8JFZ1	SCREW	3	
12	XTB3+8JFZ	SCREW	1	
301	RAE0152Z-1	TRAVERSE DECK ASS'Y	1	
301-1	SHGD113-1	RUBBER	3	
301-2	SNSD38	SCREW	2	
302	RDV0056	BELT	1	
303	RMB0549	SPRING	1	
304	RMB0561	SPRING	1	
305	RME0257	SPRING	1	
306	RME0258	SPRING	1	
307	RME0261	SPRING	1	
308	RML0516	LEVER	1	
309	RML0517	LEVER	1	
310	RML0518	LEVER	1	
311	RML0519	LEVER	1	
312	RML0520	TRAY LOCK	1	
313	RML0521	REAR LOCK	1	
314	RML0525	FRONT LOCK	1	
315	RML0530	LEVER	1	
316	RMM0201	SLIDE PLATE 1	1	
317	RMM0202	SLIDE PLATE 2	1	
318	RMB0551	SPRING	1	
319	RMB0553	SPRING	1	
320	RMQ0747	UPPER HOOK	1	
321	RMQ0749	UPPER SPINDLE	1	
322	RMX0140	DISC SPACER	5	
323	RMX0141	SPACER	1	
324	RHM245ZA	MAGNET	1	
325	RMR0334	MAGNET HOLDER	1	
326	RMR0624-W2	CLAMPER	1	
327	RMR1121-K	MECHANISM COVER	1	
328	RXQ0561	TRAY BASE	1	
329	RDG0430	GEAR,RELAY A	1	
330	RDG0431	GEAR,RELAY B	1	
331	XTV2+6G	SCREW	2	
332	RMB0552	SPRING	1	
333	RME0262	SPRING	1	
334	RME0263	SPRING	1	
335	RML0526	SPRING	1	
336	RMQ0742	SPINDLE BASE	1	
337	RMB0550	SPRING	1	
338	RML0522	LOADING STOPPER	1	
339	RMQ0743	SPINDLE SHAFT	1	
340	RMQ0744	LOWER HOOK	1	
341	RMQ0745	LOWER SPINDLE	1	
342	RMQ0746	UP,DOWN BASE	1	
343	RXQ0595	MOTOR	1	
344	XTB3+10J	SCREW	11	
345	RDG0424	GEAR,DRIVE	1	
346	RDG0425	GEAR,CHANGE	1	
347	RDG0426	GEAR,UP,DOWN	1	
348	RDG0427	GEAR,TRAVERSE CAM	1	
349	RDG0428	GEAR,TRAVERSE RELAY	1	
350	RDG0429	GEAR,PULLEY	1	
351	RME0109	FLOATING SPRING(1)	2	
352	RME0142	FLOATING SPRING(2)	1	
353	RMR1124-K	TRAVERSE CHASSIS	1	
354	RMS0632	TRAVERSE FIXED PIN	3	
355	XTN2+6G	SCREW	1	
356	RMQ0748	GEAR HOLDER	1	
C1	ECEA1CKS101	16V 100U	1	
C2	ECBT1E103ZF	25V 0.01U	1	
C3	ECBT1H102KB5	50V 1000P	1	
C5	RCE1CKA470BG	16V 47U	1	
C6	ECA1CM471	16V 470U	1	
C7	ECBT1E103ZF	25V 0.01U	1	
C9	ECEA1AKS221	10V 220U	1	
C11	ECBT1H102KB5	50V 1000P	1	
C12	ECBT1C103MS5	16V 0.01U	1	
C151,52	ECBT1H102KB5	50V 1000P	2	
C401	RCE1HKA3R3BG	50V 3.3U	1	
C402	ECBT1E103ZF	25V 0.01U	1	
C403	ECBT1H102KB5	50V 1000P	1	
C404,05	ECBT1E103ZF	25V 0.01U	2	
C406	ECEA1AKS221	6.3V 220U	1	
C407	ECEA1AKS221	10V 220U	1	
C408	ECBT1H101KB5	50V 100P	1	
C410	EEAFC0J101B	6.3V 100U	1	
C411	ECBT1H104ZF5	50V 0.1U	1	
C413,14	ECBT1H471KB5	50V 470P	2	
C415,16	ECBT1E103ZF	25V 0.01U	2	
C452	ECBT1E103ZF	25V 0.01U	1	
C601	ECBT1E103ZF	25V 0.01U	1	
C602	RCE1HKA4R7BG	50V 4.7U	1	
C603-05	ECBT1H101KB5	50V 100P	3	
C701	ECEA0JKA330I	6.3V 33U	1	
C702	ECUZNE104MBN	25V 0.1U	1	
C703	ECEA0JKS101	6.3V 100U	1	
C704	ECUZNE104MBN	25V 0.1U	1	
C706	ECUV1H272KBN	50V 2700P	1	
C707	ECUV1E273KBN	25V 0.027U	1	
C710	ECUV1H121KCN	50V 120P	1	
C711,12	ECUWNE104ZFN	25V 0.1U	2	
C713	ECUZNE104MBN	25V 0.1U	1	
C714	ECEA0JKS101	6.3V 100U	1	
C715	ECUV1H272KBN	50V 2700P	1	
C716	ECUV1H821KBN	50V 820P	1	
C717	ECUWNE104ZFN	25V 0.1U	1	
C718	ECUV1E104KBN	25V 0.1U	1	
C721,22	ECUV1H030CCN	50V 3P	2	
C723	ECEA1AKS221	10V 220U	1	
C724	ECUZNE104MBN	25V 0.1U	1	
C725,26	ECUE1H102KBN	50V 1000P	2	
C727,28	ECEA1HKS010	50V 1U	2	
C730	ECUWNE104ZFN	25V 0.1U	1	
C731,32	ECEA0JKA221	6.3V 220U	2	
C733	ECUZNE104MBN	25V 0.1U	1	
C734	ECEA1AKS221	10V 220U	1	
C735-37	ECUWNE104ZFN	25V 0.1U	3	
C738	ECUE1H103KBN	50V 0.01U	1	
C739	ECUE1H152KBN	50V 1500P	1	
C742	ECUV1E273KBN	25V 0.027U	1	
C743	ECUWNE104ZFN	25V 0.1U	1	
C744	ECUE1E822KBN	25V 8200P	1	
C745	ECUV1E104KBN	25V 0.1U	1	
C747	ECUV1H181KCN	50V 180P	1	
C749	ECUE1H222KBN	50V 2200P	1	
C750,51	ECUZNE104MBN	25V 0.1U	2	
C752	ECUE1H102KBN	50V 1000P	1	
C753	ECUV1H471KBM	50V 470P	1	
C754	ECUE1H471KBN	50V 470P	1	
C760	ECUV1E104KBN	25V 0.1U	1	
CN1	RJS1A9414	CONNECTOR(14P)	1	
CN401	RJS1A6714	CONNECTOR(14P)	1	
CN402	RJS1A6723-Q	CONNECTOR(23P)	1	
CN701	RJU035T016-1	CONNECTOR(16P)	1	
CN702	RJS1A6723-1Q	CONNECTOR(23P)	1	

■ Loading Unit Parts Location


Note: When changing loading mechanism parts, apply the specified grease to the areas marked " × × " as shown in the drawing.
Ref.no. Part No.
RFKXEM30L

Ref.No.	Part No.	Part Name & Description	Pcs
301	RAE0152Z-1	TRAVERSE DECK ASS'Y	1
301-1	SHGD113-1	RUBBER	3
301-2	SNSD38	SCREW	2
302	RDV0056	BELT	1
303	RMB0549	SPRING	1
304	RMB0561	SPRING	1
305	RME0257	SPRING	1
306	RME0258	SPRING	1
307	RME0261	SPRING	1
308	RML0516	LEVER	1
309	RML0517	LEVER	1
310	RML0518	LEVER	1
311	RML0519	LEVER	1
312	RML0520	TRAY LOCK	1
313	RML0521	REAR LOCK	1
314	RML0525	FRONT LOCK	1
315	RML0530	LEVER	1
316	RMM0201	SLIDE PLATE 1	1
317	RMM0202	SLIDE PLATE 2	1
318	RMB0551	SPRING	1

Ref.No.	Part No.	Part Name & Description	Pcs
319	RMB0553	SPRING	1
320	RMQ0747	UPPER HOOK	1
321	RMQ0749	UPPER SPINDLE	1
322	RMX0140	DISC SPACER	5
323	RMX0141	SPACER	1
324	RHM245ZA	MAGNET	1
325	RMR0334	MAGNET HOLDER	1
326	RMR0624-W2	CLAMPER	1
327	RMR1121-K	MECHANISM COVER	1
328	RXQ0561	TRAY BASE	1
329	RDG0430	GEAR,RELAY A	1
330	RDG0431	GEAR,RELAY B	1
331	XTV2+6G	SCREW	2
332	RMB0552	SPRING	1
333	RME0262	SPRING	1
334	RME0263	SPRING	1
335	RML0526	SPRING	1
336	RMQ0742	SPINDLE BASE	1
337	RMB0550	SPRING	1
338	RML0522	LOADING STOPPER	1

Ref.No.	Part No.	Part Name & Description	Pcs
339	RMQ0743	SPINDLE SHAFT	1
340	RMQ0744	LOWER HOOK	1
341	RMQ0745	LOWER SPINDLE	1
342	RMQ0746	UP/DOWN BASE	1
343	RXQ0595	MOTOR	1
344	XTB3+10J	SCREW	11
345	RDG0424	GEAR,DRIVE	1
346	RDG0425	GEAR,CHANGE	1
347	RDG0426	GEAR,UP/DOWN	1
348	RDG0427	GEAR,TRAVERSE CAM	1
349	RDG0428	GEAR,TRAVERSE RELAY	1
350	RDG0429	GEAR,PULLEY	1
351	RME0109	FLOATING SPRING(1)	2
352	RME0142	FLOATING SPRING(2)	1
353	RMR1124-K	TRAVERSE CHASSIS	1
354	RMS0632	TRAVERSE FIXED PIN	3
355	XTN2+6G	SCREW	1
356	RMQ0748	GEAR HOLDER	1

Printed in Japan
F990307200YM/KH/YI(D)

AD0001011S8

Service Manual

Compact Disc Changer

Supplement

SL-EH750

Colour

(S).....Silver Type.

Area

(E).....Europe.

Subject : To inform the method To Supply Power Source

Please file and use this supplement manual together with the service manual for Model No.SL-EH750 (E), Order No.AD9903066C8.

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

1 To Supply Power Source

This Model shown above is designed to operate on power supplied from system connected.
When a component requires service, use the system connections to supply power source.
(For system connections, refer to Fig. 1-1.)

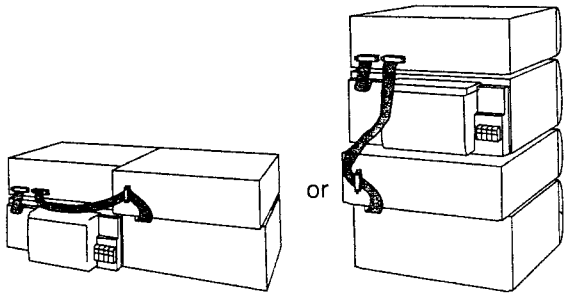


Fig. 1-1.

Technics®

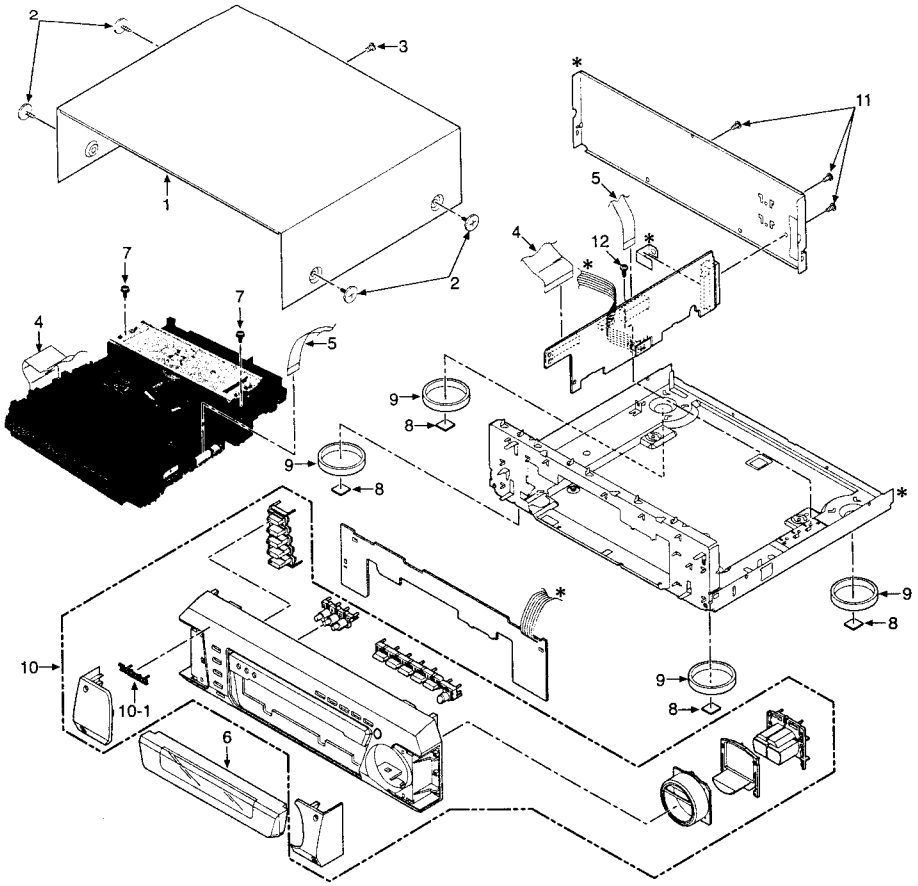
© 2000 Matsushita Electric Industrial Co., Ltd. All rights reserved. Unauthorized copying and distribution is a violation of law.

Printed in Japan F000107200MT/KH 00-01-01

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
D1	GP1S94	DIODE	1	
D2	MTZJ4R7B	DIODE	1	
! D3	MA4082LTA	DIODE	1	
D5,D6	MA165	DIODE	2	
D7	RL1N4003N02	DIODE	1	
D10	MA165	DIODE	1	
D12-14	MA165	DIODE	3	
D401-07	MA165	DIODE	7	
D601-05	LNJ301MPUJAD	LED	5	
D606	SML79455C	LED	1	
D617	MA165	DIODE	1	
IC1	TA7291P	IC	1	
! IC2	UPC29M33HB	IC	1	
IC451	M38504M6200F	IC	1	
IC452	TC74HCT7007A	IC	1	
IC601	BU2050F-E2	IC	1	
IC701	AN8839NSBE2	IC	1	
IC702	MN662790RSA	IC	1	
IC703	AN8739SBE2	IC	1	
JK401	RJT065K20	CONNECTOR(20P)	1	
L701,02	RLBN102V-Y	COIL	2	
Q1	RVTDTC143EST	TRANSISTOR	1	
! Q4	2SB621A-R	TRANSISTOR	1	
! Q5,Q6	2SC3311ATA	TRANSISTOR	2	
! Q7	2SB1548PQAU	TRANSISTOR	1	
Q401	UN4214TA	TRANSISTOR	1	
Q402-04	2SC3311ATA	TRANSISTOR	3	
Q405	UN421FTA	TRANSISTOR	1	
Q406	2SB621A-R	TRANSISTOR	1	
Q701	2SB709S	TRANSISTOR	1	
Q702	DTC143XUA106	TRANSISTOR	1	
R1	ERDS2FJ102	1/4W 1K	1	
R2	ERDS2FJ471	1/4W 470	1	
R3	ERDS2FJ223	1/4W 22K	1	
R4	ERDS2FJ101	1/4W 100	1	
R5	ERDS2FJ102	1/4W 1K	1	
R10	ERDS2FJ471	1/4W 470	1	
R11	ERDS2FJ222	1/4W 2.2K	1	
R21,22	ERDS2FJ100	1/4W 10	2	
R31	ERDS2FJ100	1/4W 10	1	
R155,56	ERDS2FJ473	1/4W 47K	2	
R157,58	ERDS2FJ221	1/4W 220	2	
R401	ERDS2FJ681	1/4W 680	1	
R402	ERDS2FJ104	1/4W 100K	1	
R403	ERDS2FJ472	1/4W 4.7K	1	
R404	ERDS2FJ222	1/4W 2.2K	1	
R405	ERDS2FJ104	1/4W 100K	1	
R406	ERDS2FJ101	1/4W 100	1	
R407	ERDS2FJ471	1/4W 470	1	
R408	ERDS2FJ222	1/4W 2.2K	1	
R409	ERDS2FJ471	1/4W 470	1	
R411-13	ERDS2FJ101	1/4W 100	3	
R414-16	ERDS2FJ222	1/4W 2.2K	3	
R419,20	ERDS2FJ102	1/4W 1K	2	
R421,22	ERDS2FJ103	1/4W 10K	2	
R423-25	ERDS2FJ472	1/4W 4.7K	3	
R426	ERDS2FJ102	1/4W 1K	1	
R427	ERDS2FJ472	1/4W 4.7K	1	
R428	ERDS2FJ473	1/4W 47K	1	
R431	ERDS2FJ103	1/4W 10K	1	
R432	ERDS2FJ472	1/4W 4.7K	1	
R433	ERDS2FJ103	1/4W 10K	1	
R434,35	ERDS2FJ101	1/4W 100	2	
R436,37	ERDS2FJ472	1/4W 4.7K	2	
R439	ERDS2FJ223	1/4W 22K	1	
R440	ERDS2FJ473	1/4W 47K	1	
R441	ERDS2FJ472	1/4W 4.7K	1	
R442	ERDS2FJ103	1/4W 10K	1	
R443	ERDS2FJ221	1/4W 220	1	
R444	ERDS2FJ472	1/4W 4.7K	1	
R445	ERDS2FJ473	1/4W 47K	1	
R446	ERDS2FJ103	1/4W 10K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R447-49	ERDS2FJ102	1/4W 1K	3	
R451-55	ERDS2FJ332	1/4W 3.3K	5	
R601	ERDS2FJ104	1/4W 100K	1	
R602-04	ERDS2FJ101	1/4W 100	3	
R605-09	ERDS2FJ221	1/4W 220	5	
R610	ERDS2FJ151	1/4W 150	1	
R611	ERDS2FJ821	1/4W 820	1	
R612	ERDS2FJ102	1/4W 1K	1	
R613	ERDS2FJ122	1/4W 1.2K	1	
R614	ERDS2FJ152	1/4W 1.5K	1	
R615	ERDS2FJ182	1/4W 1.8K	1	
R616	ERDS2FJ222	1/4W 2.2K	1	
R617	ERDS2FJ332	1/4W 3.3K	1	
R618	ERDS2FJ472	1/4W 4.7K	1	
R619	ERDS2FJ682	1/4W 6.8K	1	
R620	ERDS2FJ821	1/4W 820	1	
R621	ERDS2FJ102	1/4W 1K	1	
R622	ERDS2FJ122	1/4W 1.2K	1	
R623	ERDS2FJ152	1/4W 1.5K	1	
R624	ERDS2FJ182	1/4W 1.8K	1	
R625	ERDS2FJ222	1/4W 2.2K	1	
R626	ERDS2FJ332	1/4W 3.3K	1	
R627	ERDS2FJ472	1/4W 4.7K	1	
R701	ERJ6GEYJ4R7V	1/10W 4.7	1	
R702	ERJ6GEYJ103V	1/10W 10K	1	
R704	ERJ6GEYJ102A	1/10W 1K	1	
R705	ERJ6GEYJ154V	1/10W 150K	1	
R706	ERJ6GEYJ102A	1/10W 1K	1	
R707	ERJ6GEYJ393V	1/10W 39K	1	
R708	ERJ6GEYJ223Z	1/10W 22K	1	
R709	ERJ6GEYJ683Z	1/10W 68K	1	
R711	ERJ6GEYJ823	1/10W 82K	1	
R712	ERJ8GEYJ221V	1/8W 220	1	
R714	ERJ6GEYJ682V	1/10W 6.8K	1	
R715	ERJ6GEYJ102A	1/10W 1K	1	
R717,18	ERJ6GEYJ102A	1/10W 1K	2	
R721	ERJ6GEYJ101V	1/10W 100	1	
R723	ERJ6GEYJ682V	1/10W 6.8K	1	
R724	ERJ6GEYJ183V	1/10W 18K	1	
R725	ERJ6GEYJ391V	1/10W 390	1	
R727-29	ERJ6GEYJ392V	1/10W 3.9K	3	
R731	ERJ6GEYJ682V	1/10W 6.8K	1	
R735,36	ERJ6GEYJ101V	1/10W 100	2	
R741	ERJ6GEYJ473V	1/10W 47K	1	
R742	ERJ6GEYJ224Z	1/10W 220K	1	
R744	ERJ6GEYJ124V	1/10W 120K	1	
R749	ERJ6GEYJ472V	1/10W 4.7K	1	
R753	ERJ6GEYJ100	1/10W 10	1	
RJ701	ERJ6GEY0R00A	CHIP JUMPER	1	
RJ702-10	ERJ8GEY0R00A	CHIP JUMPER	9	
RJ712-14	ERJ8GEY0R00A	CHIP JUMPER	3	
RJ716,17	ERJ8GEY0R00A	CHIP JUMPER	2	
RJ721,22	ERJ6GEY0R00A	CHIP JUMPER	2	
RJ724	ERJ6GEY0R00A	CHIP JUMPER	1	
RJ726-28	ERJ6GEY0R00A	CHIP JUMPER	3	
RJ731-36	ERJ6GEY0R00A	CHIP JUMPER	6	
RJ750	ERJ6GEY0R00A	CHIP JUMPER	1	
S1,S2	RSH1A032-U	SW,TRAY POSITION DET.	2	
S3	RSH1A005	SW,OPEN DET.	1	
S4	RSH1A91ZA-A	SW,CLAMP	1	
S5	RSP1A017-A	SW,BOTTOM	1	
S601-19	EVQ11G05R	SW,PUSH	19	
S701	RSH1A043-U	SW,REST	1	
X401	RSXY8M00D01T	CERAMIC RESONATOR	1	
X701	RSXB33M8J01T	OSCILLATOR	1	

■ Cabinet Parts Location



Note : We do not supply those items of parts marked ✱.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	RKM0399-S	TOP CABINET	1	
2	RHD30007-K1	SCREW	4	
3	XTBS3+8JFZ1	SCREW	1	
4	REZ1200	FFC	1	
5	REZ1201	FFC	1	
6	RYF0520-S	CD LID ASS'Y	1	
7	XTW3+8T	SCREW	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
8	RKA0105-K	RUBBER	4	
9	RKA0106-N	RING	4	
10	RYP0896-S	FRONT PANEL	1	
10-1	RGB0025-A	TECHNICS BADGE	1	
11	XTBS3+6JFZ1	SCREW	3	
12	XTB3+8JFZ	SCREW	1	